



# Form 10-K

VEECO INSTRUMENTS INC - VECO

Filed: March 16, 2005 (period: December 31, 2004)

Annual report which provides a comprehensive overview of the company for the past year



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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-K**

(Mark One)



**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2004

OR



**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from            to            .

Commission file number 0-16244

**VEECO INSTRUMENTS INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**

(State or Other Jurisdiction of Incorporation or Organization)

**11-2989601**

(I.R.S. Employer Identification No.)

**100 Sunnyside Boulevard  
Suite B**

Woodbury, New York  
(Address of Principal Executive Offices)

**11797**

(Zip Code)

Registrant's telephone number, including area code **(516) 677-0200**

Website: **www.veeco.com**

Securities registered pursuant to Section 12(b) of the Act:

None

Securities registered pursuant to Section 12(g) of the Act:

**Common Stock, par value \$.01 per share**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Registration S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by references in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2) Yes ☒ No ☐

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price of the common stock on July 2, 2004 as reported on The Nasdaq National Market, was approximately \$377,130,737. Shares of common stock held by each officer and director and by each person who owns 5% or more of the outstanding common stock have been excluded from this computation in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

At March 10, 2005, the registrant had 29,858,417 outstanding shares of common stock.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held on May 25, 2005 are incorporated by reference into Part III of this Annual Report on Form 10-K.



This Annual Report on Form 10-K (the "Report") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Discussions containing such forward-looking statements may be found in Items 1, 3, 7 and 7A hereof, as well as within this Report generally. In addition, when used in this Report, the words "believes," "anticipates," "expects," "estimates," "plans," "intends," and similar expressions are intended to identify forward-looking statements. All forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from projected results. These risks and uncertainties include, without limitation, the following:

- The cyclical nature of the microelectronics industries we serve directly affects our business.
- We operate in a highly competitive industry characterized by rapid technological change.
- We depend on a limited number of customers that operate in highly concentrated industries.
- Our quarterly operating results fluctuate significantly.
- Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses.
- Our inability to attract, retain and motivate key employees could have a material adverse effect on our business.
- We are exposed to the risks of operating a global business.
- Our success depends on protection of our intellectual property rights. We may be subject to claims of intellectual property infringement by others.
- We face securities class action lawsuits which could result in substantial costs, diversion of management's attention and resources and negative publicity.
- We rely on a limited number of suppliers.
- We may not obtain sufficient affordable funds to finance our future needs.
- We are subject to risks of non-compliance with environmental and safety regulations.
- We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our company by another company more difficult.
- The matters set forth in this Report generally, including the risk factors set forth in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Consequently, such forward-looking statements should be regarded solely as the Company's current plans, estimates and beliefs. The Company does not undertake any obligation to update any forward-looking statements to reflect future events or circumstances after the date of such statements.



**Available Information**

We file annual, quarterly and current reports, information statements and other information with the Securities and Exchange Commission (the "SEC"). The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>.

**Internet Address**

We maintain a website where additional information concerning our business and various upcoming events can be found. The address of our website is [www.veeco.com](http://www.veeco.com). We provide a link on our website, under Investors—Financial Info—SEC Filings, through which investors can access our filings with the SEC, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports. These filings are posted to our Internet site, as soon as reasonably practicable after we electronically file such material with the SEC.



**Item 1. Business.****The Company**

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco," the "Company" or "we") designs, manufactures, markets and services a broad line of equipment primarily used by manufacturers in the data storage, semiconductor, wireless and HB-LED (high brightness light emitting diode) industries. These industries help create a wide range of information age products such as computer integrated circuits, personal computers, hard disk drives, network servers, digital cameras, wireless phones, TV set-top boxes and personal digital assistants. Our broad line of products features leading edge technology and allows customers to improve time-to-market of their next generation products. Veeco's products are also enabling advancements in the growing field of nanoscience and other areas of scientific and industrial research.

Veeco's process equipment products precisely deposit or remove (etch) various materials in the manufacturing of advanced thin film magnetic heads ("TFMHs") for the data storage industry, semiconductor deposition of mask reticles, compound semiconductor/wireless and LED devices. During 2004, the Company split out the former process equipment segment into two separate reportable segments. The first segment, called "Ion Beam and Mechanical Process Equipment," combines the etch, deposition, and dicing and slicing products sold mostly to data storage customers. The second segment, called "Epitaxial Process Equipment," includes the Molecular Beam Epitaxy ("MBE") and Metal Organic Chemical Vapor Deposition ("MOCVD") products primarily sold to HB-LED and wireless telecommunications customers. As such, the Company has restated the segment information for prior periods as if the composition of its reportable segments described above had existed in such prior periods. Veeco's Metrology equipment is used to provide critical surface measurements on semiconductor devices and TFMHs. This equipment allows customers to monitor their products throughout the manufacturing process in order to improve yields, reduce costs and improve product quality. Veeco's metrology solutions are also used by many universities, scientific laboratories and industrial applications. Veeco sells its broad line of atomic force microscopes ("AFM"), optical interferometers and stylus profilers to thousands of research facilities and scientific centers worldwide.

Demand for our products has been driven by the increasing miniaturization of microelectronic components; the need for manufacturers to meet reduced time-to-market schedules while ensuring the quality of those components; and, in the data storage industry, the introduction of giant magnetoresistive ("GMR") and tunneling magnetoresistive ("TMR") TFMHs which require additional manufacturing steps and the ability to take critical measurements for quality control and other purposes during the manufacturing process. The ability of Veeco's products to precisely deposit thin films, and/or etch sub-micron patterns and make critical surface measurements in these components enables manufacturers to improve yields and quality in the fabrication of advanced microelectronic devices.

Veeco serves its worldwide customers through our global sales and service organization located throughout the United States, Europe, Japan and Asia Pacific. At December 31, 2004, Veeco had 1,261 employees, with manufacturing, research and development and engineering facilities located in New York, Arizona, California, Colorado, Minnesota and New Jersey.

Veeco was organized as a Delaware corporation in 1989.

**Our Strategy**

Veeco's strategy is to:

- Capitalize on the long-term growth opportunities in the data storage and wireless and lighting industries by expanding our process equipment and metrology technology solutions;



- Pursue focused market opportunities in the semiconductor industry in which Veeco has specific technology leadership;

- Capitalize on the growth opportunities in scientific research instrumentation, specifically investment in nanoscience and nanotechnology on a global basis;

- Invest in internally generated new products through an active research and development program, and also pursue strategic acquisitions to further expand the Company's breadth of product lines to accommodate the needs of its customer base;

- Leverage Veeco's technology and strategic customer relationships and assist customers' time-to-market for their new products; and

- Utilize the Company's global sales and service network to further strengthen customer relationships.

## Recent Events

### *Internal Accounting Investigation; Restatement of 2004 Financial Results*

On February 11, 2005, Veeco announced the postponement of the release of audited results for the fourth quarter and year ended December 31, 2004, pending completion of an internal investigation of improper accounting transactions at its TurboDisc® business unit. Veeco acquired the assets of TurboDisc in November 2003. The investigation focused principally on the value of inventory, accounts payable and certain liabilities, as well as certain revenue transactions of TurboDisc. The investigation was commenced after Veeco's internal audit staff and corporate financial management discovered improper accounting transactions in the course of a Veeco internal audit and transitioning the business to Veeco's SAP accounting system during the fourth quarter of 2004. The Audit Committee of the Company's Board of Directors supervised the accounting investigation and authorized Veeco's outside counsel, Kaye Scholer LLP, to hire Jefferson Wells International to perform forensics and accounting reconstruction work as part of the investigation. The investigation has been completed. Conclusions reached during the investigation included that the improper accounting entries were made by a single individual at TurboDisc whose employment had been terminated prior to the commencement of the investigation, and that there was no evidence found of embezzlement or diversion of corporate assets.

The results of the investigation led to the restatement of financial statements previously issued for the three quarterly periods and nine months ended September 30, 2004. The restatement included a \$10.2 million adjustment to pre-tax earnings, comprised of \$8.1 million in adjustments relating to inventory, accruals and accounts payable and \$2.1 million in adjustments relating to revenue recognition issues. Additional information relating to the restatement is included in "Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations.*" Veeco has made a number of personnel changes to help strengthen the management of the epitaxial process equipment group and the TurboDisc business unit since the discovery of the accounting issues giving rise to the investigation, including the replacement of the General Manager of the epitaxial process equipment group, creation of the positions of General Manager of the TurboDisc business unit, General Manager of the St. Paul MBE site, Group Controller of the epitaxial process equipment group and the appointment of a new controller of the TurboDisc business unit.

### *Purchase of MTI*

On October 5, 2004 Veeco acquired certain assets and assumed certain liabilities of Manufacturing Technology Inc. ("MTI"), a privately held manufacturer of slicing and dicing equipment for the data storage industry, for \$9.5 million in cash. MTI is based in Ventura, California. In connection with the acquisition, Veeco hired approximately 70 of MTI's employees. With this acquisition, Veeco created an integrated "Slider Process Equipment" division consisting of MTI (slicing and dicing) and the precision



lapping and automation business of Advanced Imaging, Inc. ("Aii"), which the company acquired in November 2003. Veeco's product line now includes all of the critical slider manufacturing steps controlling fly height for next generation TFMHs.

By the end of March 2005, Veeco anticipates substantially completing the consolidation of Aii and MTI into its Camarillo, California facilities with approximately 125 employees.

#### *Cost Reduction Initiatives/Restructuring Charges*

In response to the weak, industry-wide capital equipment spending conditions in the third quarter of 2004, particularly in the HB-LED/wireless, semiconductor and data storage markets, Veeco developed an expense reduction plan and restructured its business and operations in order to improve profitability in 2005 by reducing employment levels by 10%. These actions were completed during the fourth quarter of 2004 and in early 2005.

As a result of this plan and other factors, the Company recorded merger, restructuring and other expenses of approximately \$5.0 million in the fourth quarter of 2004. The \$5.0 million charge consisted of \$2.8 million of personnel severance costs, \$0.8 million accrued for costs related to the internal investigation of improper accounting transactions of its TurboDisc business unit, \$0.8 million of asset impairment charges related to the consolidation of the Aii and MTI business and a \$0.6 million purchased in-process technology write-off in connection with the MTI acquisition.

#### *Deferred Tax Valuation Allowance*

As part of the process of preparing Veeco's Consolidated Financial Statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves estimating the actual current tax expense, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet. The carrying value of deferred tax assets is adjusted by a valuation allowance to recognize the extent to which the future tax benefits will be recognized on a more likely than not basis. Our net deferred tax assets consist primarily of net operating loss and tax credit carryforwards, and timing differences between the book and tax treatment of inventory and other asset valuations. Realization of these net deferred tax assets is dependent upon our ability to generate future taxable income.

We record valuation allowances in order to reduce our deferred tax assets to the amount expected to be realized. In assessing the adequacy of recorded valuation allowances, we consider a variety of factors, including the scheduled reversal of deferred tax liabilities, future taxable income, and prudent and feasible tax planning strategies. Under Statement of Financial Accounting Standards ("SFAS") No. 109 "Accounting for Income Taxes," factors such as current and previous operating losses are given significantly greater weight than the outlook for future profitability in determining the deferred tax asset carrying value.

For the year ended December 31, 2004, the Company recorded a charge of approximately \$54.0 million to establish a valuation allowance against the balance of its domestic net deferred tax assets, which consist of net operating loss and tax credit carryforwards, as well as temporary deductible differences. The valuation allowance was calculated in accordance with the provisions of SFAS No. 109, which places primary importance on the Company's historical results of operations. Although the Company's results in prior years were significantly affected by restructuring and other charges, the Company's historical losses and losses incurred in the current fiscal year represented negative evidence sufficient to require a full valuation allowance under the provisions of SFAS No. 109. If the Company is able to realize part or all of the deferred tax assets in future periods, it will reduce its provision for income taxes with a release of the valuation allowance in an amount that corresponds with the income tax liability generated.



**Industry Background**

*General Introduction:* The market for microelectronic components continues to be driven by corporate and consumer use of information age products such as network personal computers ("PCs"), servers and the Internet, among others. While the Company believes that the PC and server markets are the primary drivers of disk drive unit growth, disk drives are also increasingly being used for emerging consumer applications such as ipods, television set-top boxes, video-on-demand systems and small electronic devices such as digital cameras and personal digital assistants.

Continued demand for smaller, faster and less expensive microelectronic components, particularly in the computer industry, has led to increasing miniaturization of products. This miniaturization is achieved through an increased number of manufacturing steps involving greater use of precise etching and deposition equipment. In addition, metrology systems are used throughout the manufacturing process in order to monitor process accuracy, product quality, repeatability, and to measure critical dimensions and other physical features such as film thickness, line width, step height, sidewall angle and surface roughness, thereby improving yields. Wireless components, semiconductor and compound semiconductor devices, TFMHs, HB-LEDs and other electronic components often consist of many intricate patterns on circuits or film layers. Depending upon the specific design of any given integrated circuit, a variety of film thicknesses and a number of layers and film types will be used to achieve desired performance characteristics.

*Trends in the Data Storage Industry:* Worldwide storage demand continues to double every nine months, driven by intelligent internet storage, e-commerce, e-mail and new consumer applications now reaching higher volume including TV set-top boxes, personal audio and video recorders, digital cameras, auto navigation and music distribution systems. Hard disk drives have continued to provide the best value for mass storage. The use of disk drives in many types of consumer applications has resulted in growth in the number of hard drive units shipped, which is expected to continue. In February 2005, TrendFocus, a data storage research organization, forecasted that the demand for miniature drives will double in 2005 and grow more than 50% per year through 2008.

In order to satisfy market demand for devices with greater storage capacity, the data storage industry developed new head designs by incorporating higher areal densities, which enable storage of more data. The capacity of disk drives is largely determined by the capability of the magnetic recording heads, which read and write signals onto hard disks. The data storage industry continues to fund the development of new high-density thin film head technology, increasing areal density by approximately 30% every year. In November 2004, Peripheral Research, a data storage research organization, forecasted that thin film head production (including both GMR and TMR) will grow from approximately 646 million heads in 2002 to over one billion heads in 2007. Disk drive manufacturers are now increasing production of new 80 GB platters and funding development of 120 GB and beyond technology. In fact, the data storage technology roadmap is more aggressive than the semiconductor industry's requirements for critical dimensions, film thickness, interface control and material selections.

Next generation hard disk drives will require new magnetic materials, smaller dimensional tolerances and increased automation in manufacturing. The Company believes that despite capital spending constraints within the data storage industry, substantial investment continues to be made in GMR and more advanced TMR technology. Furthermore, consolidation in the disk drive industry has led to fewer financially stable manufacturers. Veeco has introduced several new process equipment products (including its NEXUS Ion Beam Etch and Ion Beam Deposition products) to respond to the data storage industry's continued technology advances. Additionally, the Company's purchase of Aii and MTI and the creation of Slider Process Equipment enables Veeco to produce more components of the TFMH manufacturing process including lapping, slicing and dicing, components that the process previously did not provide.



*Trends in the Semiconductor Industry:* Current semiconductor industry technology trends include smaller feature sizes (sub-0.10 micron line widths), larger substrates (i.e., the transition to 300mm wafers) and the increased use of metrology in the manufacturing process. According to VLSI, a semiconductor research organization, the percentage of capital expenditures devoted to metrology tools by semiconductor manufacturers is the fastest growing part of the equipment business, and VLSI forecasts that these expenditures will increase from approximately \$3 billion in 2002 (or 10% of the \$30 billion wafer fab equipment market) to approximately \$4.5 billion in 2005 (or 8% of the forecasted \$53 billion wafer fab equipment market). Semiconductor manufacturers use metrology tools in their wafer fabrication facilities to detect process deviations as early in the manufacturing process as possible. These tools are critical for yield enhancement resulting in cost reduction in this increasingly competitive environment.

Veeco has sold over 300 automated AFM systems used in-line by manufacturers of semiconductor chips in their fabrication facilities. Veeco's AFMs are used by all of the top 10 integrated device manufacturers worldwide. Veeco's family of non-destructive AFM products include our Vx Series Atomic Force Profilers ("AFP"), which combine AFM resolution with long-scan capability and are well suited for etch depth measurements; our X3D AFM for CMP advanced lithography applications; and our Dimension X AFM for advanced etch measurements, which was introduced in late 2003. In 2004, semiconductor manufacturers continued to place Veeco AFMs in-line for critical process measurements.

Research and development expenditures by semiconductor companies and photomask manufacturers to extend the capabilities of photomasks are increasing. Photomasks are used to create intricate patterns on semiconductor wafers. One example of this is the investment being made to develop extreme ultraviolet processes for use in the manufacturing of photomasks. In addition to our Dimension X3D AFM mentioned above, in 2004 Veeco sold a NEXUS Low Defect Density ("LDD") Ion Beam Deposition ("IBD") system for advanced photomask deposition to a leading Photomask manufacturer and continues to advance development efforts through our relationship with Sematech North in Albany.

*Trends in the HB-LED/Wireless Industries:* In 2003, the International Technology Roadmap for Semiconductors voted to include non-silicon, wireless components (gallium arsenide and indium phosphide) on its roadmap. Veeco believes that ultimately compound semiconductor and traditional silicon materials will be used to create tomorrow's "systems on a chip" devices. The Company believes that future growth in this industry will be tied to the trend toward convergence and integration of semiconductor, compound semiconductor and wireless devices to produce cheaper, faster integrated components.

It is Veeco's intention to position itself as a leading supplier of process equipment and metrology solutions to be used to create a broad range of compound semiconductor based devices such as mobile cell phones, wireless local area networks, and high-brightness blue/green/white LEDs for backlighting applications. With our 2003 purchase of TurboDisc MOCVD technology from Emcore Corporation, Veeco is now the only supplier of the two key epitaxial deposition technologies used for wireless and HB-LED applications: MOCVD and MBE. MOCVD and MBE technologies are used to grow compound semiconductor materials (such as GaAs (gallium arsenide), GaN (gallium nitride) and InP (indium phosphide)) at the atomic scale. Epitaxy is the critical first step in compound semiconductor wafer fabrication and is considered to be the highest value added process, ultimately determining device functionality and performance. The combination of MOCVD and MBE increases Veeco's customer base and total available market, and provides us with unique market positioning opportunities. Strategies Unlimited, an LED industry organization, in its February 2005 market report, forecasted that the market for HB-LEDs will double from slightly less than \$3 billion in 2003 to \$6 billion in 2008. LEDs are becoming increasingly more prevalent in automotive applications, flat panel displays and other backlighting applications.



In 2004, demand for Veeco's HB-LED MOCVD systems fluctuated greatly. In the first half of the year orders for new equipment doubled, and then subsequently fell approximately 70% from the second quarter of 2004 to the third quarter of 2004 as customers initially over-invested, and then delayed, spending on new equipment. As often occurs in cyclical industries, by the end of 2004 this business had stabilized at a low level. Veeco anticipates that future applications for HB-LEDs, such as LCDs, automotive applications and general illumination, will spur further growth of this business in the future. The market for GaN devices (LEDs, laser diodes and other similar electronic devices) is expected to grow at a 17% compound annual growth rate from 2004 through 2009 (source: Strategies Unlimited, February 2005). The Company remains confident in the multi-year growth opportunity to provide enabling equipment to the HB-LED industry.

*Trends in the Research Industry:* Veeco's broad based research business has historically tracked the growth of the economy and GDP, as our equipment and instruments are used in a wide range of industrial applications. A meaningful trend in the research industry is the growth in nanotechnology investment occurring at the scientific and university level. Nanotechnology is the "ability to design and control the structure of an object at all lengths from the atom up to the macro scale." Nanotechnology may lead to molecular level assembly allowing for the ability to build structures from the molecular level up, potentially eliminating waste, creating new compositions and materials, and enhancing the properties of materials. These innovations may lead to the creation of computer chips and other devices that are thousands of times smaller than current technologies permit.

Nanoscience and nanotechnology have received significant funding from the U.S. government and other countries, and are beginning to impact many industries, including life sciences, data storage, semiconductor, telecommunications and materials sciences. According to the National Nanoscience Initiative (NNI: <http://www.nano.gov>), U.S. Government funding for nanotechnology R&D has increased dramatically, from \$116 million in 1997 to an estimated \$961 million in 2004. Worldwide government funding is estimated to have increased to about five times what it was in 1997, exceeding \$2 billion in 2003. Asian countries, including Japan, China and Korea, as well as several European countries, have made leadership in nanotechnology national priorities. Veeco's metrology instruments are used by nanotechnology researchers, and Veeco currently sells to most major scientific and research organizations engaged in the field of nanotechnology. Veeco continues to introduce new AFMs and Scanning Probe Microscopes ("SPMs") to respond to the growing need for specialized scientific research metrology tools.

In 2004, Veeco and The Dow Chemical Company (NYSE: DOW) announced that the U.S. Commerce Department's National Institute of Standards and Technology ("NIST") Advanced Technology Program ("ATP") awarded them \$6.6 million in funding for a three-year project to develop a quantitative nano-mechanical measurement instrument. Veeco and Dow's proposal was one of 32 selected for award funding from a total of 870 proposals following a rigorous peer-review selection process. Veeco and Dow propose to jointly develop and validate the world's first platform for high speed, high bandwidth, quantitative nano-mechanical measurements ("QNM") on length scales smaller than 50nm, on a wide range of materials. Successful completion of this proposal would lead to the creation of a new measurement platform enabling the development of nanomaterials. The QNM will be developed at Veeco. The platform will be based on recently demonstrated advancements in atomic force microscopy.



**Veeco's Products**

Veeco has three primary business lines, ion beam and mechanical process equipment, epitaxial process equipment and metrology. Historical contribution to net sales by each of these product lines is shown below for the years indicated:

	Year ended December 31,		
	2004	2003	2002
(Dollars in millions)			
<b>Ion Beam and Mechanical Process Equipment</b>	\$ 134.0	\$ 95.9	\$ 116.2
% of net sales	34.3%	34.3%	38.9%
<b>Epitaxial Process Equipment</b>	\$ 93.6	\$ 34.3	\$ 30.5
% of net sales	24.0%	12.3%	10.2%
<b>Metrology</b>	\$ 162.8	\$ 149.1	\$ 152.2
% of net sales	41.7%	53.4%	50.9%

See Note 8 to the Consolidated Financial Statements of the Company for additional information regarding the Company's reportable segments and sales by geographic location.

Below is a matrix indicating the industries to which Veeco's product families are primarily sold. This chart shows that Veeco's core technologies are applicable to multiple market opportunities:

	Data Storage	Semiconductor	HB-LED/Wireless	Scientific Research/ Industrial
<b>Ion Beam and Mechanical Process Equipment</b>				
Ion Beam Deposition	X	X	X	X
Ion Beam Etch	X		X	
Physical Vapor Deposition	X		X	X
Diamond Like Carbon Deposition	X			
Precision Lapping, Slicing, Dicing	X			X
<b>Epitaxial Process Equipment</b>				
Molecular Beam Epitaxy		X	X	X
Metal Organic Chemical Vapor Deposition			X	X
<b>Metrology</b>				
Atomic Force Microscopes (automated)	X	X		
Research AFMs and SPMs	X	X	X	X
Stylus Profilers	X	X		X
Optical Interferometers	X	X		X

***Ion Beam and Mechanical Process Equipment***

Veeco produces and sells several types of process equipment products capable of precisely depositing or etching thin film products, primarily used in the manufacture of data storage components such as TFMHs and compound semiconductor/wireless devices. Veeco's process equipment product line includes:

***Ion Beam Deposition ("IBD") Systems:*** Veeco's IBD systems utilize ion beam technology to deposit precise layers of thin films and may be included on Veeco's cluster system platform to allow either parallel or sequential etch/deposition processes. Ion beam deposition systems deposit high purity thin film layers and provide maximum uniformity and repeatability. In addition to IBD systems, Veeco provides a broad array of ion beam sources.



*Ion Beam Etch ("IBE") Systems:* Veeco develops and produces IBE systems, which etch precise, complex features for use primarily by data storage and telecommunications device manufacturers in the fabrication of discrete and integrated microelectronic devices.

*Physical Vapor Deposition ("PVD") Systems:* Veeco's PVD systems deposit more than 20 types of materials, offering manufacturers a highly flexible platform for developing next-generation data storage and compound semiconductor applications. Veeco's PVD provides multiple targets, speeding the transition from development to high-volume production.

*Diamond-Like Carbon ("DLC") Deposition Systems:* Veeco's DLC deposition systems deposit protective coatings on advanced TFMHs. The system consists of a single cassette vacuum loadlock and a high vacuum processing chamber with two ion beam sources.

*Precision Lapping, Dicing and Slicing:* Veeco's Aii/MTI product lines (combined, referred to as "slider process equipment") include lapping tools which enable precise material removal within three nanometers which is necessary for next generation TFMHs. We also manufacture instruments for slicing and dicing of TFMHs and rowbars.

#### *Epitaxial Process Equipment*

*Molecular Beam Epitaxy Systems:* MBE is the process of precisely depositing epitaxially aligned atomically thin crystal layers, or epilayers, of elemental materials onto a substrate in an ultra-high vacuum environment. For many compound semiconductors, MBE is the critical first step of the fabrication process, ultimately determining device functionality and performance. The performance characteristics of compound semiconductors are dependent on the crystalline structure, chemical composition, number and precise thickness of the epilayers. As a result, MBE is considered to be one of the highest value added steps in the production of compound semiconductors. Veeco provides a broad array of MBE components and systems for research and production applications.

*Metal Organic Chemical Vapor Deposition:* Veeco's TurboDisc products are a recognized industry leader in MOCVD production systems. TurboDisc reactors are used in the growth of III-V compounds for numerous compound semiconductor applications, including data and telecommunications modules, cellular telephones and solar cells. Our TurboDisc production systems are the recognized leader in growing gallium nitride-based devices, most notably green, blue and white HB-LEDs, which are used today in large area signage, mobile device backlighting and specialty illumination.

#### *Metrology*

Veeco's surface metrology product line includes atomic force/scanning probe microscopes, optical metrology tools and stylus profilers. These products offer a broad range of solutions to customers in the data storage and semiconductor industries, as well as versatile tools for use by research and development centers and universities.

*Atomic Force/Scanning Probe Microscopes:* Veeco produces a broad range of AFM/SPM products designed for data storage, semiconductor and research and other industrial applications. Veeco's family of automated, non-destructive AFM products include our Vx Series Atomic Force Profilers which combine AFM resolution with long-scan capability; our X3D AFM for CMP and photomask applications; and our Dimension X AFM for etch measurements which was introduced in late 2003. Veeco also has the world's broadest line of research AFMs and SPMs. Our Nanoscope products are widely used by leading nanotechnology research centers worldwide. Veeco was a pioneer of AFM technology and continues to develop new products for production and research applications.

The atomic force microscope "feels" the sample surface directly using a probe consisting of a very sharp tip mounted on a microscopic spring arm (a cantilever). The interaction of the probe with the



surface is detected by measuring deflections of the cantilever with an optical beam system. AFMs, which permit non-destructive measurements and resolution at the molecular level, can directly measure both lateral and vertical shapes with nanometer resolution and with direct 3D capability. In contrast, light-based metrology instruments, including confocal microscopes, have limited lateral resolution for measurements of less than half the wavelength of light, or less than about 250 nanometers. In addition to topography, AFMs can also directly measure the magnetic field (such as magnetic bits on a hard disk); electric field; hardness (such as thin film integrity); electric charge density (such as dopant concentrations in semiconductors); temperature (such as temperature distribution in disk drive recording head elements); and various chemical properties (such as the difference in binding preference among biological molecules). AFMs make these measurements on almost any surface; in air, vacuum or under fluids; and with minimal sample preparation.

*Stylus Profilers:* Stylus profilers are used to produce cross-sectional representations and/or quantitative measurements, which are displayed on a video monitor. Veeco's stylus profiler systems utilize a precision translation stage which creates relative motion between the sample and a diamond tipped stylus. As the sample moves under the stylus, surface variations cause vertical translation of the stylus, which is tracked and measured. Stylus profilers are widely used for height, width, pitch and roughness measurements of features on semiconductor devices, magnetic and optical storage media (such as hard drives), flat panel displays and hybrid circuits. Stylus profilers are often used for direct contact measurements and to measure larger feature sizes than Veeco's AFMs. Veeco believes that its stylus profiler products are recognized for their accuracy, repeatability, ease of use and technology features, and are designed to meet a range of industry specifications and customer requirements.

*Optical Metrology (Interferometry) Products:* Substantially all of Veeco's optical metrology instruments are designed to make non-contact surface measurements using interferometry technology. This process involves the use of either white light or laser sources to measure surface roughness and shape by creating interference patterns from the optical path difference between the test surface and a reference surface. Using a combination of phase shifting interferometry and vertical scanning interferometry, these instruments are designed to rapidly and precisely measure and characterize a range of surface sizes and shapes. Veeco's major optical products include the *NT* family and *SP3000* and the *HD-Series* optical profilers. The *NT* family product line measures surface roughness, heights and shapes. The *HD-Series* instruments are a line of microstructure measurement equipment used by manufacturers of mass memory components including manufacturers of TFMHs, disks, drives and suspensions. *HD-Series* instruments are used for research and development, production control, process improvement, incoming parts inspection, final parts inspection and field failure analysis.

### Service and Sales

Veeco recognizes that its customer service organization is a significant factor in the Company's success. The Company provides service and support on a warranty, service contract or an individual service-call basis. Veeco also offers enhanced warranty coverage and services, including preventative maintenance plans, on-call and on-site service plans and other comprehensive service arrangements, product and application training, consultation services and a 24-hour hotline service for certain products. The Company believes that offering 24 hour, 7 day per week worldwide support creates stronger relationships with customers and provides it with a significant competitive advantage. Approximately 17% of Veeco's net sales for the year ended December 31, 2004, constituted revenues from part sales, service and support.

Veeco sells its products and services worldwide through various strategically located sales and service facilities located in the U.S., Europe, Asia Pacific, and Japan. As of December 31, 2004, Veeco employed 203 sales and marketing representatives, 168 field service representatives and 60 product support representatives. During the years ended December 31, 2004 and 2003, Veeco recorded approximately \$43.7 million and \$44.4 million, respectively, in revenues from independent sales



representatives which represented approximately 11% and 16%, respectively, of total consolidated revenues. During 2004 and 2003, revenues generated by sales representatives related to the sale of ion beam and mechanical process equipment units approximated \$17.5 million and \$10.9 million, respectively, revenues generated by sales representatives related to the sale of epitaxial process equipment units approximated \$13.4 million and \$2.8 million, respectively, and revenues generated by sales representatives related to the sale of metrology units approximated \$12.8 million and \$30.7 million, respectively.

### **Customers**

Veeco sells its products to many of the world's major data storage, semiconductor and HB-LED/wireless component manufacturers, and to customers in other industries, research centers and universities. For the year ended December 31, 2004, 29% of Veeco's sales were to scientific research and industrial customers, 32% to data storage customers, 25% to HB-LED/wireless customers and 14% to semiconductor customers. We rely on certain principal customers for a significant portion of our sales including Seagate Technology, Inc., which has been one of our largest customers during the last three years. Sales to Seagate accounted for 10%, 11% and 13% of Veeco's total net sales in the years ended December 31, 2004, 2003 and 2002, respectively. If any principal customer discontinues its relationship with us or suffers economic difficulties, our business, prospects, financial condition and operating results could be materially and adversely affected.

### **Research and Development**

Veeco believes that continued and timely development of new products and enhancements to existing products are necessary to maintain its competitive position. Veeco works collaboratively with its customers to help ensure its technology and product roadmaps are aligned with customer requirements. Veeco's research and development programs are organized by product line and new or improved products have been introduced into each of Veeco's product lines in each of the past three years.

Veeco's research and development expenses were approximately \$58.3 million, \$48.9 million and \$53.9 million, or approximately 14.9%, 17.5% and 18.0% of net sales for the years ended December 31, 2004, 2003 and 2002, respectively. These expenses consisted primarily of salaries, project material and other product development and enhancement costs.

### **Manufacturing**

The Company's principal manufacturing activities, which consist principally of design, assembly, integration and test operations, are organized by product and take place at our facilities in Plainview, New York; Santa Barbara and Camarillo, California; Tucson, Arizona; Ft. Collins, Colorado; Somerset, New Jersey; and St. Paul, Minnesota.

The Company's sales, marketing, manufacturing and research and development functions are organized by product families. The Company believes that this organizational structure allows each product family manager to more closely monitor the products for which he is responsible, resulting in more efficient sales, marketing, manufacturing and research and development. The Company emphasizes customer responsiveness, customer service, high quality products and an interactive management style. By implementing these management philosophies, the Company believes that it has increased its competitiveness and positioned itself for future growth.

Certain of the components and sub-assemblies included in the Company's products are obtained from a single source or a limited group of suppliers. Although the Company does not believe it is dependent upon any of these suppliers as a sole source or limited source for any critical components, the inability of the Company to develop alternative sources, if necessary, a prolonged interruption in



supply or a significant increase in the price of one or more components could adversely affect the Company's operating results and Consolidated Statement of Operations.

### **Backlog**

Veeco's backlog increased to \$142.0 million at December 31, 2004 from \$124.4 million at December 31, 2003. Backlog adjustments of \$16.4 million during 2004 included order cancellations of \$15.2 million. Veeco acquired \$4.2 million of backlog from acquisitions in 2004. The Company's backlog generally consists of product orders for which a purchase order has been received and which are scheduled for shipment within twelve months. Veeco schedules production of its systems based on order backlog and customer commitments. Because certain of the Company's orders require products to be shipped in the same quarter in which the order was received, and due to possible changes in delivery schedules, cancellations of orders and delays in shipment, the Company does not believe that the level of backlog at any point in time is an accurate indicator of the Company's future performance. Due to changing business conditions and customer requirements, the Company may continue to experience cancellation and/or rescheduling of orders.

### **Competition**

In each of the markets that it serves, Veeco faces substantial competition from established competitors, some of which have greater financial, engineering, manufacturing and marketing resources than Veeco as well as from smaller competitors. In addition, many of Veeco's products face competition from alternative technologies, some of which are more established than those used in Veeco's products. Significant factors for customer selection of metrology and process equipment tools include system performance, accuracy, repeatability, ease of use, reliability, cost of ownership and technical service and support. Veeco believes that it is competitive based on the customer selection factors in each market Veeco serves. None of Veeco's competitors competes with Veeco across all of Veeco's product lines.

Veeco competes with process equipment manufacturers such as Anelva, Unaxis, Hitachi, Shimadzu, Riber, Aixtron and Oxford Instruments. Veeco competes with metrology product manufacturers such as KLA-Tencor, Seiko, Hitachi, Zygo Corporation and a variety of small manufacturers.

### **Intellectual Property**

Veeco's success depends in part on its proprietary technology. Although Veeco attempts to protect its intellectual property rights through patents, copyrights, trade secrets and other measures, there can be no assurance that Veeco will be able to protect its technology adequately or that competitors will not be able to develop similar technology independently.

Veeco has patents and exclusive and non-exclusive licenses to patents owned by others covering certain of its products, which Veeco believes provide it with a competitive advantage. Veeco has a policy of seeking patents on inventions concerning new products and improvements as part of its ongoing research, development and manufacturing activities. Veeco believes that there is no single patent which is critical to its operations, and that the success of its business depends primarily on the technical expertise, innovation and experience of its employees.

Veeco also relies upon trade secret protection for its confidential and propriety information. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to Veeco's trade secrets or that Veeco can meaningfully protect its trade secrets. In addition, the Company cannot be certain that it will not be sued by third parties alleging that the Company has infringed their patents or other intellectual property rights. If any third party sues Veeco, the Company's business, results of operations or financial condition could be materially adversely affected.



**Employees**

At December 31, 2004, the Company had 1,261 employees, of which there were 384 in manufacturing and testing, 203 in sales and marketing, 168 in service, 60 in product support, 278 in engineering, research and development, and 168 in information technology, general administration and finance. The success of the Company's future operations depends in large part on the Company's ability to recruit and retain engineers, technicians and other highly-skilled professionals who are in considerable demand. There can be no assurance that the Company will be successful in recruiting or retaining key personnel. The Company believes that its relations with its employees are good.

Other than Edward H. Braun, Don R. Kania and John F. Rein, Jr., the Company's Chairman and Chief Executive Officer, President and Chief Operating Officer, and Executive Vice President and Chief Financial Officer, respectively, the Company's executive officers and key employees are not, in general, subject to employment agreements or non-competition agreements with the Company.

**Item 2. Properties.**

The Company's headquarters office and its principal manufacturing, research and development and sales and service facilities, as well as the approximate size and the segments which utilize such facilities, are:

<b>Owned Facilities Location</b>	<b>Approximate Size (sq. ft.)</b>	<b>Mortgaged</b>	<b>Use</b>
Plainview, NY	80,000	No	Ion Beam and Mechanical Process Equipment
Santa Barbara, CA	100,000	Yes	Metrology
St. Paul, MN (1)	125,000	Yes	Epitaxial Process Equipment
Tucson, AZ (2)	110,000	No	Metrology
Somerset, NJ	80,000	No	Epitaxial Process Equipment
<b>Leased Facilities Location</b>	<b>Approximate Size (sq. ft.)</b>	<b>Lease Expires</b>	<b>Use</b>
Fort Collins, CO (3)	47,000	2009	Ion Beam and Mechanical Process Equipment
Fremont, CA	14,000	2005	Ion Beam and Mechanical Process Equipment
Camarillo, CA (4)	48,000	2007	Ion Beam and Mechanical Process Equipment
Camarillo, CA (4)	26,000	2012	Ion Beam and Mechanical Process Equipment
Santa Barbara, CA	11,000	2006	Metrology
Ventura, CA (5)	125,000	2009	Ion Beam and Mechanical Process Equipment
Woodbury, NY	32,000	2011	Headquarters

(1)  
The Company's epitaxial process equipment business utilizes approximately 95,000 square feet of this facility. The balance is available for expansion.

(2)  
The Company's optical metrology business utilizes approximately 75,000 square feet of this facility. The balance is available for expansion.

(3)  
The lease on a 13,000 square foot section of this property expires in 2007, while the lease on the remaining 34,000 square feet expires in 2009.



(4)

Two facilities are currently leased by Veeco from the former principal shareholder of Aii. Management believes that the rental fees paid under these leases are at fair market value.

(5)

The Company is in the process of vacating this facility and intends to pursue a sublease of this facility.

The Santa Barbara, California and St. Paul, Minnesota facilities are subject to mortgages, which at December 31, 2004, had outstanding balances of \$5.9 million and \$3.9 million, respectively. The Company also leases small offices in Chadds Ford, Pennsylvania and Edina, Minnesota, for sales and service. The Company's foreign subsidiaries lease space for use as sales and service centers in England, France, Germany, Japan, Korea, Malaysia, Singapore, China and Taiwan. The Company believes its facilities are adequate to meet its current needs.

### **Item 3. Legal Proceedings.**

#### **Environmental**

The Company may, under certain circumstances, be obligated to pay up to \$250,000 in connection with the implementation of a comprehensive plan of environmental remediation at its Plainview, New York facility. The Company has been indemnified for any liabilities it may incur in excess of \$250,000 with respect to any such remediation. No comprehensive plan has been required to date. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any remediation plan that may be proposed.

The Company is aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by the Company in Santa Barbara, California. The Company has been indemnified for any liabilities it may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any such liabilities.

The former owner of the land and building in which the Company's Santa Barbara, California metrology operations are located has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that is part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise.

#### **Non-Environmental**

On September 17, 2003, the Company filed a lawsuit in the United States District Court for the Central District of California against Asylum Research Inc., a privately-held company founded by former Veeco employees. The lawsuit alleges that the manufacture, use and sale of Asylum's MFP-3D AFM constitutes willful infringement of five patents owned by the Company, as well as other claims. The Company is suing for unspecified monetary damages and a permanent injunction to stop infringement. Asylum has asserted that the patents the Company is suing on are invalid and unenforceable, and has filed a counterclaim for infringement of a patent licensed by Asylum, and payment of royalties it believes it is owed. Cross motions for summary judgment related to the issues of infringement and/or validity of the patents in suit are pending. The Court has held hearings on the summary judgment motions and has referred many of the issues to a Special Master. The Company believes that Asylum's claims are without merit and intends to vigorously pursue its claims.

On February 11, 2005, the Company issued a press release announcing, among other things (a) the postponement of the release of its financial results for the fourth quarter and full year ended December 31, 2004 pending completion of an internal investigation of improper accounting transactions at its TurboDisc business unit and (b) Veeco's expectation that this investigation will lead to



adjustments requiring the restatement of the Company's financial statements previously issued for the quarterly periods and nine months ended September 30, 2004.

Following the February 11 announcement, a putative class action shareholder suit was filed in federal court in the Southern District of New York asserting claims for violation of federal securities laws on behalf of persons who acquired the Company's securities during the period beginning November 3, 2003 and ending February 10, 2005. In addition, five putative class action shareholder suits were filed in federal court in the Eastern District of New York on behalf of persons who acquired Veeco securities during the period beginning November 3, 2003 or April 26, 2004 and ending February 10, 2005. The lawsuits name Veeco, its Chairman and Chief Executive Officer, and its Executive Vice President and Chief Financial Officer as defendants, and seek unspecified damages. The lawsuits allege claims against all defendants for violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and claims against the individual defendants for violations of Section 20(b) of the Exchange Act. The Company believes these lawsuits are without merit and intends to defend vigorously against the claims.

On or about February 28, 2005, the Company received a letter on behalf of a shareholder demanding that the Company commence legal action against its directors and certain of its officers for breaches of fiduciary duties relating to the improper accounting transactions at the TurboDisc business unit. The letter states that, if the Board does not commence such an action within a reasonable period of time, the shareholder will commence a derivative action on the Company's behalf seeking damages allegedly sustained by the Company and the return of all bonuses, restricted stock, stock options and other incentive compensation.

The Company is involved in various other legal proceedings arising in the normal course of its business. The Company does not believe that the ultimate resolution of these matters will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

**Item 4. Submission of Matters to a Vote of Security Holders.**

None.



**Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.**

The Company's common stock is quoted on The NASDAQ National Market under the symbol "VECO." The 2004 and 2003 high and low closing bid prices are as follows:

	2004		2003	
	High	Low	High	Low
First Quarter	\$ 33.99	\$ 24.91	\$ 17.55	\$ 11.94
Second Quarter	31.49	22.73	20.23	14.74
Third Quarter	24.71	18.66	23.95	17.23
Fourth Quarter	22.63	17.61	29.48	20.86

On March 10, 2005, the closing bid price for the Company's common stock on the NASDAQ National Market was \$14.26. As of March 10, 2005, the Company had approximately 234 shareholders of record.

In December 2001 and January 2002, the Company issued \$220.0 million of 4.125% convertible subordinated notes in a private placement. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share. The Company pays interest on these notes on June 21 and December 21 of each year. The notes will mature on December 21, 2008. The total \$220.0 million of convertible subordinated notes are convertible into approximately 5,712,800 shares of Veeco common stock, which number is subject to adjustment in the event of stock splits and certain other transactions.

The Company has not paid dividends on its common stock. The Company intends to retain future earnings, if any, for the development of its business and, therefore, does not anticipate that the Board of Directors will declare or pay any dividends on the common stock in the foreseeable future. In addition, certain provisions of the Company's credit facility limit the Company's ability to pay dividends. The Board of Directors will determine future dividend policy based on the Company's consolidated results of operations, financial condition, capital requirements and other circumstances.

The following table gives information about our common stock that may be issued under our equity compensation plans as of December 31, 2004. See Note 5 to the Consolidated Financial Statements included herein for information regarding the material features of these plans.

Plan category	Number of securities be issued upon exercise to of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	7,103,143 (A) \$	26.338	832,683
Equity compensation plans not approved by security holders	675,061 (B) \$	25.057	—
Total	7,778,204		832,683

(A)

Includes 10,727 stock options assumed in connection with the acquisition of CVC, Inc. ("CVC") on May 10, 2000, which merger was approved by stockholders.

(B)

Includes 251,158 stock options assumed in connection with the acquisition of Applied Epi, Inc. ("Applied EPI") on September 17, 2001.



The financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with the Company's Consolidated Financial Statements and notes thereto included elsewhere in this Form 10-K.

Years ended December 31,					
	2004	2003	2002	2001	2000
(In thousands, except per share data)					
<b>Statement of Operations Data:</b>					
Net sales	\$ 390,443	\$ 279,321	\$ 298,885	\$ 449,251	\$ 376,113
Cost of sales	238,686	152,307	183,042 (3)	260,148 (4)	219,578 (5)
Gross profit	151,757	127,014	115,843	189,103	156,535
Costs and expenses	158,337	129,436	142,827	154,114	131,469
Merger, restructuring and other expenses	3,562 (1)	5,403 (2)	11,248 (3)	3,046 (4)	14,206 (5)
Asset impairment charges	816 (1)	—	99,663 (3)	3,418 (4)	3,722 (5)
Write-off of purchased in-process technology	600 (1)	1,500 (2)	—	8,200 (4)	—
Operating (loss) income	(11,558)	(9,325)	(137,895)	20,325	7,138
Interest expense (income), net	8,470	7,811	6,002	(577)	(1,307)
(Loss) income from continuing operations before income taxes and cumulative effect of accounting change	(20,028)	(17,136)	(143,897)	20,902	8,445
Income tax provision (benefit) from continuing operations	42,527 (6)	(7,389)	(20,513)	6,020	5,780
(Loss) income from continuing operations	(62,555)	(9,747)	(123,384)	14,882	2,665
Discontinued operations:					
Loss from operations, net of taxes	—	—	—	(2,450)	(2,163)
Loss on disposal, net of taxes	—	—	(346)	(2,123)	—
Loss from discontinued operations, net of taxes	—	—	(346)	(4,573)	(2,163)
Cumulative effect of change in accounting principle, net of taxes (7)	—	—	—	—	(18,382)
Net (loss) income	\$ (62,555)	\$ (9,747)	\$ (123,730)	\$ 10,309	\$ (17,880)
<b>(Loss) income per common share:</b>					
(Loss) income per common share from continuing operations	\$ (2.11)	\$ (0.33)	\$ (4.24)	\$ 0.57	\$ 0.11
Loss from discontinued operations	—	—	(0.01)	(0.17)	(0.09)
Cumulative effect of change in accounting principle	—	—	—	—	(0.77)
Net (loss) income per common share	\$ (2.11)	\$ (0.33)	\$ (4.25)	\$ 0.40	\$ (0.75)
<b>Diluted (loss) income per common share from continuing operations</b>					
	\$ (2.11)	\$ (0.33)	\$ (4.24)	\$ 0.56	\$ 0.11
Loss from discontinued operations	—	—	(0.01)	(0.17)	(0.09)
Cumulative effect of change in accounting principle	—	—	—	—	(0.73)
Diluted net (loss) income per common share	\$ (2.11)	\$ (0.33)	\$ (4.25)	\$ 0.39	\$ (0.71)
Weighted average shares outstanding	29,650	29,263	29,096	25,937	23,805
Diluted weighted average shares outstanding	29,650	29,263	29,096	26,355	25,128



**Balance Sheet Data:**

Cash, cash equivalents and short-term investments	\$	100,276	\$	106,830	\$	214,295	\$	203,154	\$	90,314
Goodwill		94,645		72,989		30,658		125,585		9,481
Working capital		216,802		257,466		351,106		358,023		220,463
Total assets		576,913		596,464		605,387		752,237		420,561
Long-term debt (including current installments)		229,935		230,268		230,585		219,063		16,062
Shareholders' equity		252,352		306,329		307,573		423,971		282,908

(1)

Veeco incurred merger, restructuring and other expenses of \$3.6 million during the year ended December 31, 2004. Of these charges, \$2.8 million were for personnel severance costs and \$0.8 million was accrued for costs related to the internal investigation of improper accounting transactions at its TurboDisc business unit. Asset impairment charges of \$0.8 million related to the consolidation of the Aii and MTI business were recorded relating to certain long-lived assets that were classified as held for sale as of December 31, 2004. Veeco also recorded a charge of \$0.6 million related to the write-off of purchased in-process technology in connection with the MTI acquisition. See Note 7 to the Consolidated Financial Statements.

(2)

Veeco incurred merger and restructuring and purchased in-process technology charges of \$6.9 million during the year ended December 31, 2003. Of these charges, \$5.4 million related to merger and restructuring charges (\$4.8 million for severance and business relocation costs, and \$0.6 million for other merger and related expenses), and \$1.5 million for the write-off of purchased in-process technology (\$1.0 million write-off from the Aii acquisition and a \$0.5 million write-off from the TurboDisc acquisition). See Note 7 to the Consolidated Financial Statements.

(3)

Veeco incurred merger, restructuring and asset impairment charges of \$126.0 million during the year ended December 31, 2002. Of these charges, \$99.7 million related to asset impairment charges (\$94.4 million for goodwill impairment, \$3.5 million for impairment of land and buildings and \$1.8 million for impairment of other fixed assets), \$15.0 million was associated with the write-off of inventory (included in cost of sales), \$6.4 million was due to the write-off of costs associated with the termination of the FEI Company merger agreement, \$5.4 million for severance and business relocation costs and \$0.3 related to a prepayment penalty for the early extinguishment of debt. The merger and restructuring charges are offset in part by approximately \$0.8 million of income related to the settlement of a post-retirement benefit plan for employees in the ion beam and mechanical process equipment segment. See Note 7 to the Consolidated Financial Statements.

(4)

Veeco incurred merger and restructuring charges of \$28.2 million during the year ended December 31, 2001. Of these charges, \$13.6 million related to the write-off of inventory (included in cost of sales), \$8.2 million related to the write-off of purchased in-process technology (\$7.0 million resulting from the acquisition of Applied Epi and \$1.2 million from the acquisition of ThermoMicroscopes Corp. ("TM")), \$3.0 million represented restructuring costs and \$3.4 million for the write-down of long-lived assets.

(5)

Veeco incurred merger and reorganization charges of \$33.3 million during the year ended December 31, 2000, of which \$33.0 million related to the merger with CVC. Of these charges, \$15.3 million related to a write-off of inventory (included in cost of sales), \$14.0 million represented merger and reorganization costs (of which \$9.2 million related to investment banking, legal and other transaction costs and \$4.8 million pertained to duplicate facility and personnel costs) and \$3.7 million was for the write-off of long-lived assets.

(6)

For the year ended December 31, 2004 the Company recorded a charge of approximately \$54.0 million to establish a valuation allowance against the balance of its domestic net deferred tax assets. See Note 6 to the Consolidated Financial Statements.

(7)

Effective January 1, 2000, Veeco changed its method of accounting for revenue recognition in accordance with Staff Accounting Bulletin ("SAB") No. 101.



## Executive Summary

Veeco designs, manufactures, markets and services a broad line of equipment primarily used by manufacturers in the data storage, semiconductor, wireless and high-brightness light emitting diode (HB-LED) industries. Veeco's instruments also enable advancements in the growing field of nanoscience and other areas of scientific and industrial research. Our process equipment products precisely deposit or remove (etch) various materials in the manufacturing of advanced thin film magnetic heads (TFMHs) for the data storage industry, semiconductor deposition of mask reticles, and wireless/telecommunications and HB-LED devices. During 2004, the Company split out the former process equipment segment into two separate reportable segments. The first segment, called "Ion Beam and Mechanical Process Equipment" combines the etch, deposition and dicing and slicing products sold mostly to data storage customers. The second segment, called "Epitaxial Process Equipment," includes the Molecular Beam Epitaxy ("MBE") and Metal Organic Chemical Vapor Deposition ("MOCVD") products primarily sold to HB-LED and wireless telecommunications customers. As such, the Company has restated the segment information for prior periods as if the composition of its reportable segments described above had existed in such prior periods. Veeco's Metrology equipment is used to provide critical surface measurements on semiconductor devices and TFMHs. This equipment allows customers to monitor their products throughout the manufacturing process in order to improve yields, reduce costs and improve product quality. Veeco's metrology solutions are also used by many universities, scientific laboratories and industrial applications. Veeco sells its broad line of atomic force microscopes ("AFM"), optical interferometers and stylus profilers to thousands of research facilities. During the past several years, we have strengthened both the metrology and process equipment product lines through strategic acquisitions and through internal product development. We currently maintain facilities in Arizona, California, Colorado, Minnesota, New Jersey and New York, with sales and service locations around the world. Each of our products is currently manufactured in only one location, since we believe that the technological know-how and precision needed to make each of our products requires specialized expertise.

## Highlights of 2004

- Revenue increased 39.8% to \$390.4 million from \$279.3 million in 2003. Excluding revenues generated by recently acquired businesses, Veeco's revenues increased 11.3%. Veeco experienced growth in all of our markets, with particular strength in the HB-LED/wireless, data storage and semiconductor industries;
- Orders increased 41.2% to \$420.3 million from \$297.6 million in 2003;
- Veeco's 2004 revenues by segment were \$134.0 million from ion beam and mechanical process equipment, \$93.6 million from epitaxial process equipment, and \$162.8 million from metrology, up 40%, 173% and 9%, respectively, from 2003;
- 2004 sales by region were 37% United States, 18% Europe, 17% Japan and 28% Asia Pacific. While Veeco experienced growth in all markets in 2004, growth in Asia Pacific revenues was the strongest, increasing 63% from 2003;
- Despite revenue increases, operating margins did not improve in several business units;
- 2004 loss before income taxes was \$20.0 million compared to \$17.1 million in 2003;
- Net loss of \$62.6 million, including merger and restructuring expenses and a valuation allowance for deferred tax assets. This compares to a net loss of \$9.7 million in 2003;



•  
 Veeco's cash decreased \$6.6 million during 2004, principally due to the purchase of MTI in October 2004.

While Veeco's revenues increased substantially in 2004, the Company's profitability declined due to a number of factors. Veeco's disappointing profitability was primarily the result of weak operating margins in several Veeco business units. Veeco's gross margin for 2004 was 38.9% compared to 45.5% in 2003, despite the significant improvement in revenues. Gross margins were particularly weak in our process equipment products, primarily sold to the data storage and HB-LED/wireless markets. In addition, the Company's selling, general and administrative expenses and research and development expenses totaled \$139.9 million in 2004 compared to \$115.6 million in 2003.

The most serious profitability issue Veeco faced during 2004 was at its TurboDisc business unit. As more fully described under "Item 1. *Business—Recent Events—Internal Accounting Investigation; Restatement of 2004 Financial Results*," Veeco discovered improper accounting at our TurboDisc business unit in New Jersey, which led to an internal investigation and accounting adjustments resulting in the restatement of our financial statements for the first nine months of 2004, including a decrease in our pre-tax earnings by \$10.2 million.

The adjustments included in the restatement are summarized in a table set forth in "Item 8, *Financial Statements and Supplementary Data—Quarterly Results of Operations*."

We have established programs designed to improve TurboDisc's profitability by reducing cost of goods through a focus on design efficiencies, better supply chain management, standardization of product offerings, reduced warranty expense and improved pricing policies. Veeco has also taken steps to improve the profitability of our other process equipment business units, including pricing actions, reduction in overhead and employment levels which were part of our 2004 fourth quarter restructuring initiatives. In particular, we are in the process of combining our former Aii and MTI operations in California into our Camarillo facilities and have reduced the headcount and employee cost of such operations. Veeco also reduced operating spending in the metrology business units. We believe that the steps taken and improvement in product margin mix should help the Company to improve profitability.

### Outlook/Opportunities

Our 2005 primary strategic objectives are as follows:

- Capitalize on the long-term growth opportunities in the data storage and wireless and LED industries by expanding our process equipment and metrology technology solutions;
- Pursue focused market opportunities in the semiconductor industry in which Veeco has specific technology leadership;
- Capitalize on the growth opportunities in scientific research instrumentation, specifically the worldwide investment in nanoscience and nanotechnology on a global basis;
- Invest in internally generated new products through an active research and development program, and also pursue selected strategic acquisitions to further expand the Company's breadth of product lines to accommodate the needs of its target customer base; and
- Pursue profitability improvements through design efficiencies, better supply chain management, standardization of product offerings and improved pricing policies.

The several years prior to 2004 have been challenging for Veeco, its customers and peers due to the prolonged economic downturn and several years of under-investment in technology. At the end of 2003 and in the first half of 2004 Veeco experienced a significant improvement in orders across its research and industrial, semiconductor, data storage and HB-LED/wireless products, driven by increased capital expenditure across these markets, which, combined with recent acquisitions, led to a



40% improvement in Veeco's 2004 revenues as compared with 2003. While capital spending declined in the second half of 2004 compared to the first half, fourth quarter orders for Veeco recovered (up 24% sequentially), led by capital spending by Veeco's data storage and semiconductor customers. Although production of HB-LED's increased throughout the year, capital equipment spending by Veeco's wireless/LED customers weakened at the end of 2004 as these customers integrated the significant purchases made by them earlier in 2004 into their operations. Overall, worldwide economic conditions appear to have improved compared to 2003. Consumer spending on many types of electronics has increased and various worldwide economies, such as those in the Asia Pacific region, are experiencing growth. The Company reviews a number of indicators to predict the strength of our markets going forward. These include plant utilization trends, capacity requirements and capital spending trends.

Technology changes are continuing in all of Veeco's markets: the continued increase of 80 GB hard drives and investment in 120GB hard drives in data storage; the increased usage of "mini" drives in consumer electronic applications; the increased use of Veeco's automated AFMs for sub 130 nanometer semiconductor applications; the opportunity for Veeco's MOCVD and MBE to further penetrate the emerging wireless and HB-LED market; and the continued funding of nanoscience research. Veeco expects that its revenues for 2005 will be somewhat flat when compared to 2004, given diverging trends and continued caution in spending on capital equipment among customers in its various end-markets. For example, while the Company believes that its data storage business will grow in 2005 due to customer spending on technology and capacity equipment, this growth will be offset by a decline in its HB-LED business in 2005 compared to 2004's over expansion in capacity by its HB-LED customers. With a flat environment on the horizon at least for 2005, Veeco's stated focus for the year is to improve the profitability of the Company through those actions outlined above.



**Results of Operations****Years Ended December 31, 2004 and 2003**

The following tables show selected items of Veeco's Consolidated Statements of Operations, percentages of sales, and comparisons between 2004 and 2003 and the analysis of sales and orders for the same periods between our segments, industries and regions (in \$000's):

	Year ended December 31,				Dollar and Percentage Inc/(Dec) Year to year	
	2004		2003			
Net sales	\$	390,443	100.0 %	\$	279,321	100.0%
Cost of sales		238,686	61.1		152,307	54.5
Gross profit		151,757	38.9		127,014	45.5
Operating expenses:						
Selling, general and administrative expense		82,511	21.2		67,986	24.3
Research and development expense		58,338	14.9		48,868	17.5
Amortization expense		18,465	4.7		13,800	5.0
Other income, net		(977)	(0.2)		(1,218)	(0.4)
Merger, restructuring and other expenses		3,562	0.9		5,403	1.9
Asset impairment charges		816	0.2		—	—
Write-off of purchased in-process technology		600	0.2		1,500	0.5
Total operating expenses		163,315	41.9		136,339	48.8
Operating loss		(11,558)	(3.0)		(9,325)	(3.3)
Interest expense		10,250	2.6		10,326	3.7
Interest income		(1,780)	(0.5)		(2,515)	(0.9)
Loss before income taxes		(20,028)	(5.1)		(17,136)	(6.1)
Income tax (benefit) provision before valuation allowance		(11,436)	(2.9)		(11,988)	(4.3)
Valuation allowance against deferred tax assets		53,963	13.8		4,599	1.7
Income tax provision (benefit)		42,527	10.9		(7,389)	(2.6)
Net loss	\$	(62,555)	(16.0)%	\$	(9,747)	(3.5)%



Orders of \$420.3 million in 2004 were a 41.2% increase as compared to 2003. By segment, orders in ion beam and mechanical process equipment increased by 27.3% due to improved data storage industry conditions resulting from the expanded use of hard drives in consumer electronics. The 243.2% improvement in epitaxial process equipment orders was driven by \$95.6 million in orders for TurboDisc



systems for production of HB-LED. This increase was due to the full year impact of TurboDisc activities in 2004, as the product line was acquired in the fourth quarter of 2003. By industry, data storage increased 35.9% on higher deposition and etch orders. Semiconductor increased 45.9% mostly due to a \$7.2 million increase in metrology orders, an \$8.9 million increase in deposition and etch orders, and \$5.9 million of MOCVD orders from the TurboDisc acquisition partially offset by a \$1.2 million decrease in MBE orders. HB-LED/wireless orders increased 129.4% predominantly due to a \$75.5 million increase in MOCVD. Regionally, the increase in orders in the U.S and APAC is mostly due to the increase in MOCVD orders.

The book-to-bill ratio for the year ended December 31, 2004, which is calculated by dividing orders received in a given time period by revenue recognized in that same time period, was 1.08 to 1. During the year ended December 31, 2004, the Company experienced order cancellations of \$15.2 million, primarily in the data storage and HB-LED/wireless industries. The Company acquired \$4.2 million of backlog as a result of the acquisition of MTI in 2004. The Company also experienced rescheduling of order delivery dates by customers. Due to changing business conditions and customer requirements, the Company may continue to experience cancellations and/or rescheduling of orders.

Gross profit for the year ended December 31, 2004, decreased as a percentage of net sales to 38.9% from 45.5% in 2003. Gross profit was \$151.8 million in 2004 compared to \$127.0 million in 2003. During the year ended December 31, 2004 and December 31, 2003, the Company incurred reductions in gross profit related to the acquisitions of TurboDisc and Aii of \$1.5 million and \$1.7 million, respectively. The reductions were the result of purchase accounting adjustments due to the required capitalization of profit in inventory and permanent elimination of certain deferred revenue, which is included in cost of sales. Excluding the impact of these adjustments, gross profit as a percentage of net sales was 39.4% in 2004, compared to 46.0% in 2003. This decrease was mostly due to a product mix shift from the higher margin metrology segment to the lower margin ion beam and mechanical process equipment and epitaxial process equipment segments, largely due to the 2003 acquisitions. The metrology percentage of total sales declined from 53.4% in 2003 to 41.7% in 2004. The ion beam and mechanical process equipment margins decreased from 39.0% to 34.5%. This reduction was principally due to an unfavorable product mix including lower margins for certain advance development products. Epitaxial process equipment margins declined from 38.4% in 2003 to 24.4% in 2004. The TurboDisc margins were negatively impacted by high warranty and material costs. The metrology gross margin for 2004 was 52.0%, compared with 52.8% in 2003.

Selling, general and administrative expenses increased \$14.5 million, or 21.4% in 2004 principally due to incremental costs of \$12.0 million attributable to the TurboDisc and Aii acquisitions, with the balance attributable to higher selling expenses related to the increase in sales, as well as consulting and audit costs related to the implementation of Section 404 of the Sarbanes-Oxley Act.

Research and development expense totaled \$58.3 million or 14.9% of sales in 2004 compared with \$48.9 million or 17.5% of sales in 2003. This \$9.4 million increase in spending principally resulted from \$8.2 million of incremental costs attributable to the TurboDisc and Aii acquisitions.

Other income, net, decreased by \$0.2 million primarily due to lower gains realized on the sale of assets held for sale in 2004 than in 2003.

The Company incurred merger, restructuring and other expenses of \$3.6 million during 2004 comprised of \$2.8 million in severance related to a 10% reduction in employment in the fourth quarter of 2004 and \$0.8 million for costs related to the internal investigation of improper accounting transactions at TurboDisc. The \$2.8 million charge for severance related costs include approximately 107 management, administration and manufacturing employees located at the Company's Plainview, New York and Camarillo, California ion beam and mechanical process equipment operations, the Somerset, New Jersey and St. Paul, Minnesota epitaxial process equipment operations, the Santa Barbara, California and Tucson, Arizona metrology facilities, the sales and service offices located in



France, England and Singapore, and the corporate offices in Woodbury, New York. As of December 31, 2004, approximately \$0.7 million has been paid and approximately \$2.1 million remains accrued. The remainder is expected to be paid by the fourth quarter of 2005. As of December 31, 2004, the \$0.8 million investigation costs remained accrued, and are expected to be paid by the second quarter of 2005. Asset impairment charges of \$0.8 million in 2004 related to the consolidation of the Aii and MTI business and pertained to certain long-lived assets of Aii that were classified as held for sale as of December 31, 2004. In accordance with SFAS No. 144, these long-lived assets are measured at the lower of their carrying amount or fair value less selling costs. The merger, restructuring and other expenses of \$5.4 million in 2003 was primarily due to severance costs related to the actions announced in the fourth quarter of 2002. (See Note 7 to the Consolidated Financial Statements of the Company for details).

The \$0.6 million write-off of purchased in-process technology for 2004 resulted from the MTI acquisition for projects that had not reached technological feasibility and had no alternate uses. (See Note 2 to the Consolidated Financial Statements of the Company for details on the projects included). Expenditures to complete MTI's projects are subject to change, given the uncertainties of the development process, and no assurances can be given that deviations from the estimated completion dates will not occur. Additionally, the projects will require maintenance research and development spending after they have reached a state of technological and commercial feasibility. There are risks associated with these projects and there is no assurance that these projects will be technologically feasible or commercially successful. In 2003, the Company wrote off \$1.5 million of purchased in-process technology from the TurboDisc and Aii acquisitions for \$0.5 million and \$1.0 million, respectively. Accordingly, these amounts were expensed at the acquisition dates. As of December 31, 2004, all of the projects related to these charges have either been completed or cancelled. (See Note 2 to the Consolidated Financial Statements of the Company for details on the projects included).

Interest income totaled \$1.8 million compared to \$2.5 million in the comparable 2003 period. The change is due to the lower cash balances as a result of the acquisitions completed in the fourth quarter of 2003, partially offset by \$0.4 million in interest income on a federal income tax refund received in the third quarter of 2004.

Income taxes for the year ended December 31, 2004 amounted to \$42.5 million, or 212.3% of loss before income taxes as compared with a benefit of \$7.4 million, or 43.1% of loss before income taxes in 2003. The difference between the statutory tax benefit and the effective tax rate in 2004 was primarily a result of an increase of \$54.0 million in the valuation allowance for its domestic deferred tax assets (See Note 6 to the Consolidated Financial Statements of the Company for details).



**Years Ended December 31, 2003 and 2002**

The following tables show selected items of Veeco's Consolidated Statements of Operations, percentages of sales and comparisons between 2003 and 2002 and the analysis of sales and orders for the same periods between our segments, industries and regions (in \$000's):

	Year ended December 31,				Dollar and Percentage Inc/(Dec) Year to Year				
	2003		2002						
Net sales	\$	279,321	100.0%	\$	298,885	100.0%	\$	(19,564)	(6.5)%
Cost of sales		152,307	54.5		183,042	61.2		(30,735)	(16.8)
Gross profit		127,014	45.5		115,843	38.8		11,171	9.6
Operating expenses:									
Selling, general and administrative expense		67,986	24.3		75,899	25.4		(7,931)	(10.4)
Research and development expense		48,868	17.5		53,889	18.0		(5,021)	(9.3)
Amortization expense		13,800	5.0		13,323	4.5		477	3.6
Other income, net		(1,218)	(0.4)		(284)	(0.1)		(934)	(328.9)
Merger, restructuring and other expenses		5,403	1.9		11,248	3.8		(5,845)	(52.0)
Write-off of purchased in-process technology		1,500	0.5		—	—		1,500	100.0
Asset impairment charges		—	—		99,663	33.3		(99,663)	(100.0)
Total operating expenses		136,339	48.8		253,738	84.9		(117,399)	(46.3)
Operating loss		(9,325)	(3.3)		(137,895)	(46.1)		128,570	93.2
Interest expense		10,326	3.7		10,535	3.5		(209)	(2.0)
Interest income		(2,515)	0.9		(4,533)	(1.5)		2,018	44.5
Loss from continuing operations before income taxes		(17,136)	(6.1)		(143,897)	(48.1)		126,761	88.1
Income benefit		(7,389)	(2.6)		(20,513)	(6.8)		13,124	64.0
Loss from continuing operations		(9,747)	(3.5)		(123,384)	(41.3)		113,637	92.1
Loss on disposal, net of taxes		—	—		(346)	(0.1)		346	100.0
Net loss	\$	(9,747)	(3.5)%	\$	(123,730)	(41.4)%	\$	113,983	92.1 %

**Sales****Orders**

	Year ended December 31,											
	Dollar and Percentage Inc/(Dec) Year to Year				Dollar and Percentage Inc/(Dec) Year to Year				Book to Bill Ratio			
	Year ended December 31,											
	2003	2002			2003	2002			2003	2002		
Segment Analysis												
Ion Beam and Mechanical Process Equipment	\$ 95,882	\$ 116,218	\$ (20,336)	(17.5)%	\$ 106,696	\$ 100,699	\$ 5,997	6.0%	1.11	0.87		
Epitaxial Process Equipment	34,289	30,519	3,770	12.4	36,476	34,280	2,196	6.4	1.06	1.12		
Metrology	149,150	152,148	(2,998)	(2.0)	154,460	154,124	336	0.2	1.04	1.01		
Total	\$ 279,321	\$ 298,885	\$ (19,564)	(6.5)%	\$ 297,632	\$ 289,103	\$ 8,529	3.0%	1.07	0.97		
Industry Analysis												
Data Storage	\$ 90,646	\$ 96,584	\$ (5,938)	(6.1)%	\$ 92,770	\$ 86,641	\$ 6,129	7.1%	1.02	0.90		
HB-LED/wireless	39,083	43,833	(4,750)	(10.8)	53,574	40,428	13,146	32.5	1.37	0.92		
Semiconductor	40,218	39,325	893	2.3	45,454	47,480	(2,026)	(4.3)	1.13	1.21		
Research and Industrial	109,374	119,143	(9,769)	(8.2)	105,834	114,554	(8,720)	(7.6)	0.97	0.96		
Total	\$ 279,321	\$ 298,885	\$ (19,564)	(6.5)%	\$ 297,632	\$ 289,103	\$ 8,529	3.0%	1.07	0.97		
Regional Analysis												
US	\$ 109,323	\$ 139,342	\$ (30,019)	(21.5)%	\$ 114,089	\$ 120,730	\$ (6,641)	(5.5)%	1.04	0.87		
Europe	47,002	50,941	(3,939)	(7.7)	53,278	49,806	3,472	7.0	1.13	0.98		
Japan	56,542	52,964	3,578	6.8	59,287	55,262	4,025	7.3	1.05	1.04		
Asia Pacific	66,454	55,638	10,816	19.4	70,978	63,305	7,673	12.1	1.07	1.14		
Total	\$ 279,321	\$ 298,885	\$ (19,564)	(6.5)%	\$ 297,632	\$ 289,103	\$ 8,529	3.0%	1.07	0.97		



Net sales of \$279.3 million were down 6.5% in 2003 from 2002 levels. By segment, ion beam and mechanical process equipment sales were 17.5% lower due to a decrease of \$22.8 million in etch and deposition products partially offset by \$2.5 million in revenues realized from the Aii acquisition. The decline in etch and deposition sales was partially due to tight capital spending from our data storage customers, as well as Read-Rite Corp.'s bankruptcy in 2003. Read-Rite accounted for \$12.9 million of sales in 2002, which were not repeated in 2003. Sales of epitaxial process equipment were up 12.4% from 2002 mostly due to \$3.6 million in revenues realized from the TurboDisc acquisition. A reduction of deposition system sales to telecommunication customers resulted in lower sales to the HB-LED/wireless industry. Sales reductions of \$4.7 million in MBE, \$2.6 million of etch and deposition and \$3.5 million in optical metrology, partially offset by increases of \$1.0 million in other products, resulted in the decrease of sales to the research and industrial market. By region, there was a shift in sales from the U.S. to the Asia Pacific region. Asia Pacific sales increased due to a general pickup in business across the region, including an increase in AFM sales of \$6.8 million. \$3.5 million of the sales increase in the Asia Pacific region was attributable to the TurboDisc and Aii acquisitions. The Company believes that there will continue to be year-to-year variations in the geographic content of sales.

Orders of \$297.6 million in 2003 were a 3.0% increase over orders of \$289.1 million in 2002. Orders in ion beam and mechanical process equipment increased by 6.0% due to improved conditions across the historical product lines. The 6.4% improvement in epitaxial process equipment orders was driven by \$12.7 million in orders for TurboDisc systems, partially offset by a \$10.5 million reduction in MBE orders. By industry, the largest increase was a 32.5% increase in HB-LED/wireless, primarily due to \$11.3 million in orders received for TurboDisc products. Data storage increased 7.1% on higher deposition and etch orders. Research and industrial was down mostly due to a \$7.1 million decline in MBE orders. Semiconductor was down 4.3% due to a \$7.7 million reduction in deposition and etch equipment orders, primarily due to the lithography market, offset by improvements across other product lines. Regionally, the decline in orders in the U.S. is mostly due to a shift to overseas production, primarily in the data storage industry.

The book-to-bill ratio for the year ended December 31, 2003, which is calculated by dividing orders received in a given time period by revenue recognized in that same time period, was 1.07 to 1. During the year ended December 31, 2003, the Company experienced order cancellations of \$13.0 million, primarily in the data storage and HB-LED/wireless industries. The Company acquired \$25.1 million of backlog from companies acquired in 2003. The Company also experienced rescheduling of order delivery dates by customers. Due to changing business conditions and customer requirements, the Company may continue to experience cancellations and/or rescheduling of orders.

Gross profit for the year ended December 31, 2003, increased to \$127.0 million, or 45.5% from \$115.8 million, or 38.8% in 2002. During the year ended December 31, 2003, the Company incurred a \$1.7 million reduction in gross profit related to the acquisitions of TurboDisc and Aii. The reduction was the result of purchase accounting adjustments due to the required capitalization of profit in inventory and permanent elimination of certain deferred revenue, which is included in cost of sales. During the years ended December 31, 2003 and 2002, the Company incurred merger and restructuring charges of \$5.4 million and \$26.2 million, respectively, of which \$15.0 million, or 5.0% of net sales, related to the write off of inventory in 2002, which were included in the 2002 cost of sales. Excluding the impact of the purchase accounting adjustment in 2003 and the merger and restructuring charge in 2002, gross profit as a percentage of net sales increased to 46.0% from 43.8%. The increased gross margin is mostly due to a 9.1% improvement in the ion beam and mechanical process equipment gross margin, primarily due to the cost savings associated with plant and personnel consolidations initiated in 2002.

Selling, general and administrative expenses were down \$7.9 million or 10.4%, to \$68.0 million in 2003 from \$75.9 million in 2002, principally due to a \$5.4 million decrease in selling expense, resulting from reduced personnel, occupancy and advertising spending, as well as a \$2.5 million decrease in



administration costs, resulting from realized cost efficiencies. Such decreases were partially offset by incremental costs of \$1.2 million attributable to the TurboDisc and Aii acquisitions.

Research and development expense totaled \$48.9 million or 17.5% of sales in 2003 compared with \$53.9 million or 18% of sales in 2002. This \$5.0 million decrease in spending resulted from efficiencies achieved through the site consolidations in the process equipment segment in the fourth quarter of 2002. This decrease was partially offset by \$0.9 million of incremental costs attributable to the TurboDisc and Aii acquisitions.

Other income, net, increased by \$0.9 million primarily due to gains realized on the sale of assets held for sale.

Merger and restructuring costs of \$5.4 million in 2003, principally resulted from severance and business relocation expenses related to the cost reduction programs announced and initiated in the fourth quarter of 2002. These included the transfer of our Sunnyvale AFM business to Santa Barbara as well as severance costs incurred in the process equipment segment. (See Note 7 to the Consolidated Financial Statements of the Company for details).

The \$1.5 million write-off of purchased in-process technology for 2003 resulted from the TurboDisc and Aii acquisitions for \$0.5 million and \$1.0 million, respectively, related to projects that had not reached technological feasibility and had no alternate uses. Accordingly, these amounts were expensed at the acquisition dates. (See Note 2 to the Consolidated Financial Statements of the Company for details on the projects included). Expenditures to complete both TurboDisc's and Aii's projects are subject to change, given the uncertainties of the development process, and no assurances can be given that deviations from the estimated completion dates will not occur. Additionally, the projects will require maintenance research and development after they have reached a state of technological and commercial feasibility. There are risks associated with these projects, and there is no assurance that these projects will be technologically or commercially successful.

Interest income totaled \$2.5 million in 2003 compared to \$4.5 million in the comparable 2002 period. The decrease is due to a reduction in interest income on short-term investments as a result of lower interest rates plus lower cash balances due to the \$131.1 million cash outlay for acquired companies.

Income taxes for the year ended December 31, 2003 amounted to a benefit of \$7.4 million, or 43.1% of loss before income taxes as compared with a benefit of \$20.5 million, or 14.3% of loss before income taxes in 2002. The lower tax rate in 2002 is due to \$94.4 million of non-deductible charges taken in 2002 from the write-down of goodwill.

### **Liquidity and Capital Resources**

Veeco's primary source of funds at December 31, 2004, consisted of \$100.3 million of cash and cash equivalents. This amount represents a decrease of \$6.5 million from the December 31, 2003 balance of \$106.8 million. A contributor to this decrease was the \$9.5 million in payments for the net assets acquired in connection with the MTI acquisition. If this item is excluded, the Company generated \$3.0 million in cash in 2004. The Company's primary future cash commitment is in 2008, when the \$220 million of 4.125% convertible subordinated notes mature. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share and are redeemable by Veeco under certain circumstances. (See Note 4 to the Consolidated Financial Statements of the Company for details).

Cash provided by operations totaled \$1.0 million during the year ended December 31, 2004. Of the cash generated, \$10.5 million was derived from adjusting the net loss of \$62.6 million for non-cash charges of \$73.1 million, including \$31.3 million in depreciation and amortization expense and \$40.0 million for provision for deferred income taxes. The provision for deferred income taxes included a \$54.0 million valuation allowance that was provided in the fourth quarter of 2004 because the



Company determined that the benefit of its domestic net deferred tax assets may not be realized. The balance of \$9.5 million is from changes in operating assets and liabilities, net of acquisitions, including cash used for increases in accounts receivable and inventories of \$12.6 million and \$10.2 million, respectively, partially offset by a cash generation for increases in accounts payable of \$5.2 million and accrued expenses, deferred profit and other current assets and liabilities, net, of \$8.1 million. Accounts receivable increased primarily as a result of higher sales volume. Inventories increased as a result of a ramp-up in orders at the Company's epitaxial process equipment segment, as well as shipment delays in the metrology and epitaxial process equipment segments and the build up of raw materials and work-in-process for products to be shipped in the first quarter of 2005. The increase in accounts payable was principally the result of increased inventory levels, and the increase in accrued expenses, deferred profit and other current assets and liabilities, net, primarily due to an increase in warranty and installation obligations as a direct result of the increase in sales volume, as well as the timing of the payroll-related payments.

Cash used in investing activities of \$12.7 million for the year ended December 31, 2004 is a result of the \$9.5 million in payments for the business acquired, as noted above, plus \$1.0 million for the payment to the former shareholders of Nanodevices related to the achievement of certain production targets plus capital expenditures of \$15.5 million. Partially offsetting these cash uses were proceeds from the sale of property, plant and equipment and assets held for sale of \$4.4 million and net maturities of long-term investments of \$8.8 million.

Cash provided by financing activities in 2004 totaled \$5.4 million. The generation of cash from financing activities in 2004 primarily resulted from stock issuances.

On December 21, 2001, the Company issued \$200.0 million of 4.125% convertible subordinated notes, and on January 3, 2002, the Company issued an additional \$20.0 million of notes pursuant to an over-allotment option. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share. The Company pays interest on these notes on June 21 and December 21 of each year. The notes will mature on December 21, 2008. In connection with this offering, the Company purchased approximately \$25.9 million of U.S. government securities, which were pledged to the trustee under the indenture governing the notes, as security for the exclusive benefit of the holders of the notes. These securities were sufficient to provide for the payment in full of the first six scheduled interest payments due on the notes. There were no pledged securities remaining as of December 31, 2004. The notes are subordinated in right of payment to substantially all other indebtedness of the Company. The notes are repayable upon certain change of control events and upon the acceleration of certain other indebtedness for money borrowed of the Company. After December 20, 2004 the notes may be redeemed at the option of the Company at the redemption prices set forth in the indenture relating to the notes.

On March 15, 2005, the Company entered into a revolving credit facility which provides for borrowings of up to \$50.0 million (the "Facility"). The Facility's annual interest rate is a floating rate equal to the prime rate of the agent bank plus  $\frac{1}{4}\%$  and is adjustable to a minimum rate equal to the prime rate in the event the Company's ratio of debt to cash flow is below a defined amount. A LIBOR based interest rate option is also provided. The Facility has a term of three years and borrowings under the Facility may be used for general corporate purposes, including working capital and acquisitions. The Facility contains certain restrictive covenants, which among other requirements, impose limitations with respect to the incurrence of indebtedness, the payment of dividends, long-term leases, investments, mergers, acquisitions, consolidations and sales of assets. The Company will be required to satisfy certain financial tests under the Facility and substantially all of the assets of the Company and its material domestic subsidiaries, other than real estate, have been pledged to secure the Company's obligations under the Facility. As of March 15, 2005, no borrowings were outstanding under the Facility.



On March 15, 2005, the Company terminated its previous \$100.0 million revolving credit facility which had been established on April 19, 2001 (the "Old Facility"). For all periods during 2004 and 2003, no borrowings were outstanding under the Old Facility. As of December 31, 2004, the Company was contingently liable for a letter of credit in the amount of \$0.3 million issued under the Old Facility. This letter of credit was terminated in connection with the termination of the Old Facility.

At December 31, 2004, Veeco's contractual cash obligations and commitments are as follows (in thousands):

**Contractual Cash Obligations and Commitments**

	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Long-term debt	\$ 229,935	\$ 354	\$ 226,290	\$ 408	\$ 2,883
Interest on debt	39,917	9,656	19,246	9,600	1,415
Operating leases	26,023	5,784	12,151	4,929	3,159
Earn-out features on acquisitions	15,056	15,056	—	—	—
Letters of credit	2,169	2,169	—	—	—
Purchase commitments	833	833	—	—	—
	<u>\$ 313,933</u>	<u>\$ 33,852</u>	<u>\$ 257,687</u>	<u>\$ 14,937</u>	<u>\$ 7,457</u>

The Company believes that existing cash balances together with cash generated from operations and amounts available under the Company's \$50.0 million Facility will be sufficient to meet the Company's projected working capital and other cash flow requirements for the next twelve months, as well as the Company's contractual obligations, detailed in the above table, over the next three years. The Company believes it will be able to meet its obligation to repay the \$220 million subordinated notes that mature on December 21, 2008 through a combination of conversion of the notes outstanding, refinancing, cash generated from operations, and/or other means.

The Company is potentially liable for payment of earn-out features to the former owners of the businesses acquired in 2003 based on operating targets achieved by the acquired businesses. The maximum amount of these contingent liabilities is \$33.0 million consisting of \$9.0 million to the former shareholders of Aii, \$4.0 million to the former shareholders of Nanodevices, Inc. and \$20.0 million to Emcore, the former owner of TurboDisc. Earn-out amounts would be paid to the former shareholders of Nanodevices, Inc., during each of the first quarters of 2005, 2006 and 2007, if revenue targets are reached during the preceding year up to the maximum payment. Earn-out amounts would be paid during each of the first quarters of 2005, 2006 and 2007 to the former owners of Aii, and during each of the first quarters of 2005 and 2006 to Emcore, if revenue targets are met. Payments to the former shareholders of Aii and to Emcore are based on a set percentage of revenues in excess of certain targets for the preceding fiscal year. The Company paid \$1.0 million of the amount potentially payable to the former shareholders of Nanodevices, Inc., during the third quarter of 2004 pertaining to a one-time production payout and expects to pay the former shareholders of Nanodevices, Inc. approximately \$1.9 million during the first quarter of 2005 pertaining to the revenue based earn-out. Additionally, the Company expects to pay approximately \$13.1 million to Emcore during the first half of 2005. Except as noted herein, the Company does not have an estimate of how much, or when, amounts may be due to the former owners of Aii, Nanodevices or Emcore for each fiscal year.

The Company uses derivative financial instruments to minimize the impact of foreign exchange rate changes on earnings and cash flows. On December 30, 2004 and 2003, the Company entered into forward contracts for the month of January for the notional amounts of approximately \$16.8 million and \$19.1 million, respectively, which approximated the respective fair market value at December 31, 2004 and 2003.



**Application of Critical Accounting Policies**

**General:** Veeco's discussion and analysis of its financial condition and results of operations are based upon Veeco's Consolidated Financial Statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires Veeco to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an on-going basis, management evaluates its estimates and judgments, including those related to bad debts, inventories, intangible assets and other long lived assets, income taxes, warranty obligations, restructuring costs and contingent litigation. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company considers certain accounting policies related to revenue recognition, the valuation of inventories, the impairment of goodwill and indefinite-lived intangible assets, warranty costs, the impairment of long lived assets and the accounting for deferred taxes to be critical policies due to the estimation processes involved in each.

**Revenue Recognition:** The Company recognizes revenue in accordance with Securities and Exchange Commission ("SEC") Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition*, which superseded the earlier related guidance in SAB No. 101, *Revenue Recognition in Financial Statements*. Certain of our product sales are accounted for as multiple-element arrangements in accordance with EITF 00-21, *Revenue Arrangements with Multiple Deliverables*. A multiple-element arrangement is a transaction which may involve the delivery or performance of multiple products, services, or rights to use assets, and performance may occur at different points in time or over different periods of time. The Company recognizes revenue when persuasive evidence of an arrangement exists, the seller's price is fixed or determinable and collectibility is reasonably assured. For products produced according to the Company's published specifications, where no installation is required or installation is deemed perfunctory and no substantive customer acceptance provisions exist, revenue is recognized when title passes to the customer, generally upon shipment. For products produced according to a particular customer's specifications, revenue is recognized when the product has been tested and it has been demonstrated that it meets the customer's specifications and title passes to the customer. The amount of revenue recorded is reduced by the amount of any customer retention (generally 10% to 20%), which is not payable by the customer until installation is completed and final customer acceptance is achieved. Installation is not deemed to be essential to the functionality of the equipment since installation does not involve significant changes to the features or capabilities of the equipment or building complex interfaces and connections. In addition, the equipment could be installed by the customer or other vendors and generally the cost of installation approximates only 1% to 2% of the sales value of the related equipment. For new products, new applications of existing products, or for products with substantive customer acceptance provisions where performance cannot be fully assessed prior to meeting customer specifications at the customer site, revenue is recognized upon completion of installation and receipt of final customer acceptance. Since title to goods generally passes to the customer upon shipment and 80% to 90% of the contract amount becomes payable at that time, inventory is relieved and accounts receivable is recorded for the amount billed at the time of shipment. The profit on the amount billed for these transactions is deferred and recorded as deferred profit in the accompanying balance sheets. At December 31, 2004 and 2003, \$1.2 million and \$2.1 million, respectively, are recorded in deferred profit. Service and maintenance contract revenues are recorded as deferred revenue, which is included in other accrued expenses, and recognized as revenue on a straight-line basis over the service period of the related contract.

**Inventory Valuation:** Inventories are stated at the lower of cost (principally first-in, first-out method) or market. Management evaluates the need to record adjustments for impairment of inventory on a quarterly basis. The Company's policy is to assess the valuation of all inventories, including raw materials, work-in-process, finished goods and spare parts. Obsolete inventory or inventory in excess of



management's estimated usage for the next 18 to 24 month's requirements is written-down to its estimated market value, if less than its cost. Inherent in the estimates of market value are management's estimates related to Veeco's future manufacturing schedules, customer demand, technological and/or market obsolescence, possible alternative uses and ultimate realization of excess inventory.

*Goodwill and Indefinite-Lived Intangible Asset Impairment:* The Company has significant intangible assets related to goodwill and other acquired intangibles. In assessing the recoverability of the Company's goodwill and other indefinite-lived intangible assets, the Company must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. If it is determined that impairment indicators are present and that the assets will not be fully recoverable, their carrying values are reduced to estimated fair value. Impairment indicators include, among other conditions, cash flow deficits, an historic or anticipated decline in revenue or operating profit, adverse legal or regulatory developments, and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest levels for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. Changes in strategy and/or market conditions could significantly impact these assumptions, and thus Veeco may be required to record impairment charges for those assets not previously recorded. The Company completed the first of the required impairment tests on goodwill and indefinite lived intangible assets in the first quarter of 2002. Based upon the judgment of management, it was determined that there was no impairment to goodwill or intangibles with indefinite lives as of January 1, 2002. During the fourth quarter of 2002, management determined that due to the continued weakness in the telecommunications industry and the uncertainty of the timing and speed of recovery, impairment indicators were present. Under SFAS No. 142, if impairment indicators are present, the fair value of the reporting unit must be determined. Based upon the judgment of management, goodwill arising from the September 2001 Applied Epi acquisition which is included in the epitaxial process equipment reporting unit, was deemed significantly impaired. As a result, the Company recorded an impairment charge of \$94.4 million and has written down goodwill related to the epitaxial process equipment reporting unit to approximately \$7.5 million as of December 31, 2002. During the fourth quarter of 2004 and 2003, as required, the Company performed an annual impairment test, and based upon the judgment of management, it was determined that no impairment exists.

*Long Lived Asset Impairment:* The carrying values of long-lived assets are periodically reviewed to determine if any impairment indicators are present. If it is determined that such indicators are present and the review indicates that the assets will not be fully recoverable, based on undiscounted estimated cash flows over the remaining depreciation period, their carrying values are reduced to estimated fair value. Impairment indicators include, among other conditions, cash flow deficits, an historic or anticipated decline in revenue or operating profit, adverse legal or regulatory developments, and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest level for which there is identifiable cash flows that are largely independent of the cash flows generated by other asset groups. During 2004, \$0.8 million in fixed asset impairment charges were recorded by the Company related to the consolidation of the Aii and MTI business. During 2003 there were no indicators of impairment present. The Company recorded \$5.3 million of fixed asset impairment charges in 2002. Assumptions utilized by management in reviewing for impairment of long-lived assets could be effected by changes in strategy and/or market conditions which may require Veeco to record additional impairment charges for these assets, as well as impairment charges on other long-lived assets not previously recorded.

*Warranty Costs:* The Company estimates the costs that may be incurred under the warranty it provides and records a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by analyzing specific product and historical configuration statistics and regional warranty support costs. The Company's warranty obligation is



affected by product failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. As the Company's customer engineers and process support engineers are highly trained and deployed globally, labor availability is a significant factor in determining labor costs. The quantity and availability of critical replacement parts is another significant factor in estimating warranty costs. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from the Company's estimates, revisions to the estimated warranty liability would be required.

*Deferred Tax Valuation Allowance:* As part of the process of preparing Veeco's Consolidated Financial Statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves estimating the actual current tax expense, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within its consolidated balance sheet. The carrying value of deferred tax assets is adjusted by a valuation allowance to recognize the extent to which the future tax benefits will be recognized on a more likely than not basis. Our net deferred tax assets consist primarily of net operating loss and tax credit carryforwards, and timing differences between the book and tax treatment of inventory and other asset valuations. Realization of these net deferred tax assets is dependent upon our ability to generate future taxable income.

We record valuation allowances in order to reduce our deferred tax assets to the amount expected to be realized. In assessing the adequacy of recorded valuation allowances, we consider a variety of factors, including the scheduled reversal of deferred tax liabilities, future taxable income, and prudent and feasible tax planning strategies. Under SFAS No. 109, factors such as current and previous operating losses are given significantly greater weight than the outlook for future profitability in determining the deferred tax asset carrying value.

For the year ended December 31, 2004, the Company recorded a charge of approximately \$54.0 million to establish a valuation allowance against the balance of its domestic net deferred tax assets, which consist of net operating loss and tax credit carryforwards, as well as temporary deductible differences. The valuation allowance was calculated in accordance with the provisions of SFAS No. 109, which places primary importance on the Company's historical results of operations. Although the Company's results in prior years were significantly affected by restructuring and other charges, the Company's historical losses and losses incurred in the current fiscal year represented negative evidence sufficient to require a full valuation allowance under the provisions of SFAS No. 109. If the Company is able to realize part or all of the deferred tax assets in future periods, it will reduce its provision for income taxes with a release of the valuation allowance in an amount that corresponds with the income tax liability generated.

*Other Recent Accounting Pronouncements:* On December 16, 2004, the Financial Accounting Standards Board (FASB) issued FASB Statement No. 123 (revised 2004), *Share-Based Payment*, which is a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*. Statement No. 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. Generally, the approach in Statement No. 123(R) is similar to the approach described in Statement No. 123. However, Statement No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. Statement No. 123(R) must be adopted no later than July 1, 2005. Early adoption will be permitted in periods in which financial statements have not yet been issued. The Company expects to adopt Statement No. 123(R) on July 1, 2005.



Statement No. 123(R) permits public companies to adopt its requirements using one of two methods:

1.

A "modified prospective" method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of Statement No. 123(R) for all share-based payments granted after the effective date and (b) based on the requirements of Statement No. 123 for all awards granted to employees prior to the effective date of Statement No. 123(R) that remain unvested on the effective date.

2.

A "modified retrospective" method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under Statement No. 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

The Company has not yet determined whether it will adopt Statement No. 123(R) using the modified prospective method or the modified retrospective method.

As permitted by Statement No. 123, the Company currently accounts for share-based payments to employees using Opinion No. 25's intrinsic value method and, as such, generally recognizes no compensation cost for employee stock options. Accordingly, the adoption of Statement No. 123(R)'s fair value method will have a significant impact on consolidated results of operations, although it will have no impact on the Company's overall consolidated financial position. The impact of adoption of Statement No. 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had the Company adopted Statement No. 123(R) in prior periods, the impact of that standard would have approximated the impact of Statement No. 123 as described in the disclosure of pro forma net loss and net loss per common share in Note 1 to Veeco's Consolidated Financial Statements. Statement No. 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under current literature. This requirement will reduce consolidated net operating cash flows and increase consolidated net financing cash flows in the periods after adoption. While the Company cannot estimate what those amounts will be in the future (because they depend on, among other things, when employees exercise stock options), the amount of consolidated operating cash flows recognized in prior periods for such excess tax deductions was \$0.9 million and \$1.2 million in 2003 and 2002, respectively.

#### **Risk Factors That May Impact Future Results**

In addition to the other information set forth herein, the following risk factors should be carefully considered by shareholders of and potential investors in the Company.

#### **The cyclical nature of the microelectronics industries we serve directly affects our business.**

Veeco's business depends in large part upon the capital expenditures of data storage, HB-LED/wireless and semiconductor manufacturers, as well as research and industrial customers, which accounted for the following percentages of our net sales for the periods indicated:

	Year ended December 31,		
	2004	2003	2002
Data Storage	32 %	33 %	32 %
HB-LED/wireless	25 %	14 %	15 %
Semiconductor	14 %	14 %	13 %
Scientific Research and Industrial	29 %	39 %	40 %

Veeco is subject to the business cycles of these industries, the timing, length and volatility of which are difficult to predict. These industries have historically been highly cyclical and have experienced



significant economic downturns in the last decade. As a capital equipment provider, our revenues depend in large part on the spending patterns of these customers, who often delay expenditures or cancel or reschedule orders in reaction to variations in their businesses or general economic conditions. In downturns, we must be able to quickly and effectively align our costs with prevailing market conditions, as well as motivate and retain key employees. However, because a high proportion of our costs are fixed, our ability to reduce expenses quickly in response to revenue shortfalls is limited. A downturn in one or more of these industries could have a material adverse effect on our business, financial condition and operating results. During periods of rapid growth, we must be able to acquire and/or develop sufficient manufacturing capacity to meet customer demand, and attract, hire, assimilate and retain a sufficient number of qualified people. We cannot give assurances that our net sales and operating results will not be adversely affected if our customers experience economic downturns or slowdowns in their businesses.

**We operate in a highly competitive industry characterized by rapid technological change.**

The data storage, HB-LED/wireless, semiconductor and scientific research and industrial industries are subject to rapid technological change. Our ability to remain competitive depends on our ability to enhance existing products and develop new products in a timely and cost effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, we must anticipate the future demand for products in selecting which development programs to fund and pursue. We cannot be certain that we will be successful in selecting, developing, manufacturing and marketing new products or in enhancing existing products.

Many of our competitors have greater financial, engineering, manufacturing and marketing resources than us. In addition, we face competition from smaller emerging equipment companies whose strategy is to provide a portion of the products and services we offer, using innovative technology to sell products into specialized markets. New product introductions or enhancements by our competitors could cause a decline in sales or loss of market acceptance of our existing products. Increased competitive pressure could also lead to intensified price competition resulting in lower margins. Our failure to compete successfully with these other companies would seriously harm our business.

In addition, a substantial investment is required by customers to install and integrate capital equipment into a production line. As a result, once a manufacturer has selected a particular vendor's capital equipment, we believe that the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same vendor. Accordingly, if a customer selects a competitor's product over ours for technical superiority or other reasons, we could experience difficulty selling to that customer for a significant period of time.

**We depend on a limited number of customers that operate in highly concentrated industries.**

Our customer base is and has been highly concentrated. Orders from a relatively limited number of customers have accounted for, and likely will continue to account for, a substantial portion of our net sales, which may lead customers to demand pricing and other terms less favorable to us. Based on net sales, Seagate Technology, Inc. is our largest customer, with 10%, 11% and 13% of total net sales in 2004, 2003 and 2002, respectively (our only customer with sales greater than 10% in any of the past three years).

If a principal customer discontinues its relationship with us or suffers economic setbacks, our business, financial condition and operating results could be materially and adversely affected. Our ability to increase sales in the future will depend in part upon our ability to obtain orders from new customers. We cannot be certain that we will be able to do so. In addition, because a relatively small number of large manufacturers, many of whom are our customers, dominate the industries in which they operate, it may be especially difficult for us to replace these customers if we lose their business. A substantial portion of orders in our backlog are orders from our principal customers.



Furthermore, we do not have long-term contracts with our customers. As a result, our agreements with our customers do not provide any assurance of future sales and we are exposed to competitive price pressure on each new order we attempt to obtain. Our failure to obtain new sales orders from new or existing customers, would have a negative impact on our results of operations.

**Our quarterly operating results fluctuate significantly.**

Our quarterly results have fluctuated significantly in the past and we expect this trend to continue. Factors which affect our quarterly results, in addition to the other risk factors described herein, include:

- the timing of significant orders, shipments and customer acceptance of our products,
- rescheduling or cancellations of customer orders,
- difficulties in manufacturing or meeting technical specifications,
- changes in product mix and the cost of materials, and
- our acquisitions and financings.

We derive a substantial portion of our net sales in any fiscal period from the sale of a relatively small number of high-priced systems. As a result, the timing of recognition of revenue for a single transaction could have a material effect on our sales and operating results for a particular fiscal period. As is typical in our industry, orders, shipments and customer acceptances often occur during the last few weeks of a quarter. As a result, delay of only a week or two can often shift the related booking or net sales into the next quarter, which could adversely affect our reported results for the prior quarter.

In addition, customer purchase orders are subject to cancellation or rescheduling by the customer, generally with limited or no penalties. In limited circumstances, we have permitted major customers to return previously shipped products in order to maintain business relationships with such customers. Backlog adjustments for the year ended December 31, 2004 of \$16.4 million included order cancellations of \$15.2 million.

Historically, we have experienced long and unpredictable sales cycles (such as the period between our initial contact with a potential customer and the time when we recognize revenue from that customer). Our sales cycle can range up to twelve months. The timing of an order often depends on the capital expenditure budget cycle of our customers, which is completely out of our control. In addition, the time it takes us to build a product to customer specifications (the "build cycle") typically ranges from one to six months, followed in certain cases by a period of customer acceptance during which the customer evaluates the performance of the system and may potentially reject the system. As a result of the build cycle and evaluation periods, the period between a customer's initial purchase decision and revenue recognition on an order often varies widely, and variations in length of this period can cause further fluctuations in our operating results.

Many of these factors are beyond our control. If our orders, shipments, net sales or operating results in a particular quarter do not meet expectations, our stock price may be adversely affected.

**Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses.**

We have considered numerous acquisition opportunities and completed several significant acquisitions in the past. We may consider acquisitions of, or investments in, other businesses in the future. Acquisitions involve numerous risks, many of which are unpredictable and beyond our control, including:

- difficulties and increased costs in integrating the personnel, operations, technologies and products of acquired companies,
- diversion of management's attention while evaluating, pursuing and integrating the business to be acquired,



- potential loss of key employees of acquired companies, especially if a relocation or change in responsibilities is involved,

- difficulties in managing geographically dispersed operations in a cost-effective manner,

- lack of synergy or inability to realize expected synergies, and

- possible write-down of acquired intangible assets as a result of technological advancements or worse-than-expected performance by the acquired company.

Our inability to effectively manage these risks could materially and adversely affect our business, financial condition and operating results.

In addition, if we issue equity securities to pay for an acquisition, the ownership percentage of our then-existing shareholders would be reduced and the value of the shares held by these shareholders could be diluted, which could adversely affect the price of our stock and convertible subordinated notes. If we use cash to pay for an acquisition, the payment could significantly reduce the cash that would be available to fund our operations or other purposes, including making payments on the convertible subordinated notes. There can be no assurance that financing for future acquisitions will be available on favorable terms or at all.

**Our inability to attract, retain and motivate key employees could have a material adverse effect on our business.**

Our success depends upon our ability to attract, retain and motivate key employees, including those in managerial, engineering, marketing and other roles. Our growth is dependent on our ability to attract, retain and motivate highly skilled and qualified technical personnel, in addition to personnel that can implement and monitor our financial and managerial controls and reporting systems. Attracting, retaining and motivating qualified personnel may be difficult due to challenging industry conditions, competition for such personnel by other technology companies, consolidations and relocations of operations and workforce reductions. Our inability to attract, retain and motivate key personnel could have a material adverse effect on our business, financial condition or operating results.

**We are exposed to the risks of operating a global business.**

Approximately 63% of our 2004 net sales and 61% of our 2003 net sales were generated from sales outside the United States. We expect sales from non-U.S. markets to continue to represent a significant, and possibly increasing, portion of our sales in the future. Our non-U.S. sales and operations are subject to risks inherent in conducting business abroad, many of which are outside our control, including:

- difficulties in managing a global enterprise, including staffing, managing distributors and representatives and repatriation of earnings,

- difficulties in obtaining U.S. export licenses in connection with sales of products to customers in certain geographic regions, including China and Asia Pacific, a particular disadvantage relative to our non-U.S. competitors who are not required to comply with U.S. export controls,

- fluctuations in the relative values of currencies,

- periodic regional economic downturns and unstable political environments,

- longer sales cycles and difficulty in collecting accounts receivable, and

- multiple, conflicting and changing governmental laws and regulations, including import/export controls and other trade barriers.

Many of these challenges are present in China, a large potential market for the Company's products and an area that we anticipate will present a significant opportunity for growth. Instability in China and other foreign economies may continue and recur again in the future, which could have a



material adverse effect on our business. In addition, political instability, terrorism, acts of war or epidemics in regions where we operate may adversely affect our business and results of operations.

We are exposed to foreign currency exchange rate risks that are inherent in our anticipated sales, sales commitments and assets and liabilities that are denominated in currencies other than the United States dollar. Although we attempt to mitigate our exposure to fluctuations in currency exchange rates, these hedging activities may not always be available or adequate to eliminate, or even mitigate, the impact of our exchange rate exposure. Failure to sufficiently hedge or otherwise manage foreign currency risks properly could materially and adversely affect our revenues and gross margins. We also are exposed to interest rate risks inherent in our debt obligations and investment portfolios.

**Our success depends on protection of our intellectual property rights. We may be subject to claims of intellectual property infringement by others.**

Our success depends in part upon the protection of our intellectual property rights. We own various United States and international patents and have additional pending patent applications relating to certain of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage. In addition, our intellectual property rights may be circumvented, invalidated or rendered obsolete by the rapid pace of technological change. Furthermore, the laws of other countries may less effectively protect our proprietary rights, compared to U.S. laws. Infringement of our rights by a third party could result in uncompensated lost market and revenue opportunities.

From time to time we have received communications from other parties asserting the existence of patent or other rights which they believe cover certain of our products. We also periodically receive notice from customers who believe that we are required to indemnify them for damages they may incur related to infringement claims made against these customers by third parties. Our customary practice is to evaluate such assertions and to consider the available alternatives, including whether to seek a license, if appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur.

If we are not able to resolve a claim, negotiate a settlement of the matter, obtain necessary licenses on commercially reasonable terms, and/or successfully prosecute or defend our position, our business, financial condition and results of operations could be materially and adversely affected.

On September 17, 2003, we commenced a lawsuit against Asylum Research Inc., a privately-held company founded by former Veeco employees. The suit alleges infringement of five patents relating to our AFM technologies. We are seeking monetary damages and a permanent injunction to stop infringement. Asylum has asserted that the patents we are suing on are invalid and unenforceable and has filed a counterclaim for infringement of a patent licensed by Asylum and payment of royalties it believes it is owed. Cross motions for summary judgment related to the issues of infringement and/or validity of the patents in suit are pending. The Court has held hearings on the summary judgment motions and has referred many of the issues to a Special Master. We believe Asylum's claims are without merit. Nonetheless, the costs of pursuing this matter are significant and there can be no assurance that we will be successful in this matter.

**We face securities class action lawsuits and a derivative demand letter which could result in substantial costs, diversion of management's attention and resources and negative publicity.**

The Company, its Chairman and Chief Executive Officer, and its Executive Vice President and Chief Financial Officer were named as defendants in putative class action shareholder lawsuits filed in federal court in New York asserting claims for violation of federal securities laws on behalf of persons who acquired the Company's securities during the periods beginning November 3, 2003 or April 26, 2004 and ending February 10, 2005. The lawsuits, which are substantially similar, seek unspecified



damages and allege claims against all defendants for violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and claims against the individual defendants for violations of Section 20(b) of the Exchange Act. Although the Company believes the lawsuits are without merit and intends to defend vigorously against the claims, the lawsuits could result in substantial costs, divert management's attention and resources from our operations and negatively affect our public image and reputation. In addition, the Company has received a letter on behalf of a shareholder of the Company demanding that the Company commence legal action against its directors and certain of its officers for breaches of fiduciary duties. An unfavorable outcome or prolonged litigation in these matters could materially harm the Company's business.

**We rely on a limited number of suppliers.**

Failure of the suppliers of critical parts, components and manufacturing equipment to deliver sufficient quantities in a timely and cost-effective manner could adversely affect our business. We generally do not have guaranteed supply or pricing arrangements with our suppliers. As a result, we risk increased cost of materials and difficulty in procuring the parts we need to fill customer orders. We currently use numerous suppliers, however, some key parts may be obtained only from a single supplier or a limited group of suppliers. Failure of any of these suppliers to perform in a timely or quality manner could negatively impact our revenues and results of operations.

**We may not obtain sufficient affordable funds to finance our future needs.**

We may need to make significant capital expenditures to continue our operations and to enhance our manufacturing capability to keep pace with rapidly changing technologies. Also, our industry is characterized by the need for continued investment in research and development. If we fail to invest sufficiently in research and development, our products could become less attractive to potential customers. As a result of our emphasis on research and development and technological innovation, our operating costs may increase in the future. During the past few years, the markets for equity and debt securities have fluctuated significantly, especially with respect to technology-related companies, and during some periods offerings of those securities have been extremely difficult to complete. As a result, in the future we may not be able to obtain the additional funds required to fund our operations and invest sufficiently in research and development on reasonable terms, or at all. Such a lack of funds could have a material adverse effect on our business, financial condition and operating results.

**We are subject to risks of non-compliance with environmental and safety regulations.**

We are subject to environmental and safety regulations in connection with our business operations, including but not limited to regulations related to the development, manufacture and use of our products. Failure or inability to comply with existing or future environmental and safety regulations could result in significant remediation liabilities, the imposition of fines and/or the suspension or termination of development, manufacture or use of certain of our products, each of which could have a material adverse effect on our business, financial condition and results of operations.

**We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our company by another company more difficult.**

We have adopted and may in the future adopt certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of Veeco that a holder of our common stock might consider in its best interest. These measures include:

- "blank check" preferred stock,
- classified board of directors,
- shareholder rights plan or "poison pill," and
- certain certificate of incorporation and bylaws provisions.



Our board of directors has the authority to issue up to 500,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares ("blank check" preferred). Such preferred stock may have rights, including economic rights, senior to our common stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our common stock and could make it more difficult for a third party to acquire a majority of our outstanding common stock.

Our board of directors is divided into three classes with each class serving a staggered three-year term. The existence of a classified board will make it more difficult for the shareholders to change the composition (and therefore the policies) of our board of directors in a relatively short period of time.

We have adopted a shareholder rights plan, under which we have granted to our shareholders rights to purchase shares of junior participating preferred stock. These rights could discourage a takeover that is not approved by our board of directors but which a shareholder might consider in its best interest, thereby adversely affecting our stock price.

We have adopted certain certificate of incorporation and bylaws provisions which may have anti-takeover effects. These include: (a) requiring certain actions to be taken at a meeting of shareholders rather than by written consent, (b) requiring a super-majority of shareholders to call a special meeting of shareholders or to approve certain amendments to our bylaws, (c) limiting the maximum number of directors, and (d) providing that directors may be removed only for "cause." These measures and those described above may have the effect of delaying, deferring or preventing a takeover or other change in control of Veeco that a holder of our common stock might consider in its best interest.

In addition, we are subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a Delaware corporation from engaging in any business combination, including mergers and asset sales, with an interested stockholder (generally, a 15% or greater stockholder) for a period of three years after the date of the transaction in which the person became an interested shareholder, unless the business combination is approved in a prescribed manner. The operation of Section 203 may have anti-takeover effects, which could delay, defer or prevent a takeover attempt that a holder of our common stock might consider in its best interest.

#### **Item 7A. Quantitative and Qualitative Disclosures about Market Risk.**

##### *Market Risk*

The principal market risks (such as the risk of loss arising from adverse changes in market rates and prices) to which the Company is exposed are:

- rates on debt and short-term and long-term investment portfolios, and
- exchange rates, generating translation and transaction gains and losses.

##### *Interest Rates*

Veeco centrally manages its debt and investment portfolios considering investment opportunities and risks, tax consequences and overall financing strategies. Veeco's investment portfolios at December 31, 2004 consist of cash equivalents. At December 31, 2003 in addition to cash equivalents the investment portfolio also included obligations of U.S. government agencies. These investments in obligations of the U.S. government are considered held to maturity securities. Accordingly, the amounts are carried at amortized cost. Assuming year-end 2004 variable debt and investment levels, a one-point change in interest rates would not have a material impact on net interest expense. In December 2001 and January 2002, the Company issued an aggregate of \$220.0 million of 4.125% convertible subordinated notes. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share. The Company pays interest on these notes on June 21 and December 21 of each year. Interest payments commenced on



June 21, 2002 (see Note 4 to the Company's Consolidated Financial Statements). The notes will mature on December 21, 2008. The notes are redeemable at the option of the Company, at the redemption prices set forth in the indenture.

#### *Foreign Operations*

Operating in international markets involves exposure to movements in currency exchange rates, which are volatile at times. The economic impact of currency exchange rate movements on Veeco is complex because such changes are often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. These changes, if material, could cause the Company to adjust its financing and operating strategies. Consequently, isolating the effect of changes in currency does not incorporate these other important economic factors.

Veeco's net sales to foreign customers represented approximately 63% of Veeco's total net sales in 2004, 61% in 2003 and 53% in 2002. The Company expects that net sales to foreign customers will continue to represent a large percentage of Veeco's total net sales. Veeco's net sales denominated in foreign currencies represented approximately 23% of total net sales in 2004, 22% in 2003 and 22% in 2002. The aggregate foreign currency exchange (losses) gains included in determining consolidated results of operations were (\$0.2) million, \$0.1 million and \$0.1 million in 2004, 2003 and 2002, respectively. Included in the aggregate foreign currency exchange (losses) gains were gains (losses) relating to forward contracts of \$0.0 million, (\$0.4) million and (\$1.0) million in 2004, 2003 and 2002, respectively. These amounts were recorded and included in other income, net. As of December 31, 2004, approximately \$0.1 million of losses related to forward contracts were included in accrued expenses and subsequently paid in January 2005. On December 30, 2004, the Company entered into forward contracts for the month of January 2005 for the notional amount of \$16.8 million, which approximated the market value at December 31, 2004. Veeco is exposed to financial market risks, including changes in foreign currency exchange rates. To mitigate these risks, Veeco uses derivative financial instruments. Veeco does not use derivative financial instruments for speculative or trading purposes. The Company enters into monthly forward contracts to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known currency exposures. The average notional amount of such contracts outstanding was approximately \$18.7 million for the year ended December 31, 2004. The changes in currency exchange rates that have the largest impact on translating Veeco's international operating (loss) profit are the Japanese Yen and the Euro. The Company believes that based upon its hedging program, a 10% change in foreign exchange rates would have an immaterial impact on the consolidated results of operations. The Company believes that this quantitative measure has inherent limitations because, as discussed in the first paragraph of this section, it does not take into account any governmental actions or changes in either customer purchasing patterns or our financing and operating strategies.

#### **Item 8. Financial Statements and Supplementary Data.**

The Consolidated Financial Statements of the Company are listed in the Index to Consolidated Financial Statements and Financial Statement Schedule filed as part of this Form 10-K.

#### **Quarterly Results of Operations**

The following table presents selected financial data for each quarter of fiscal 2004 and 2003. Although unaudited, this information has been prepared on a basis consistent with the Company's audited Consolidated Financial Statements and, in the opinion of the Company's management, reflects all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of this information in accordance with U.S. generally accepted accounting principles. Such quarterly results are not necessarily indicative of future results of operations and should be read in conjunction with the audited Consolidated Financial Statements of the Company and the notes thereto.



## Quarterly Statements of Operations (In thousands):

	Fiscal 2004					Fiscal 2003				
	Q1(1)	Q2(1)	Q3(1)	Q4	Year	Q1	Q2	Q3	Q4	Year
Net sales	\$ 90,863	\$ 99,246	\$ 97,367	\$ 102,967	\$ 390,443	\$ 65,779	\$ 73,449	\$ 63,144	\$ 76,949	\$ 279,321
Cost of sales	54,065	58,331	61,913	64,377	238,686	34,573	40,655	32,845	44,234	152,307
Gross profit	36,798	40,915	35,454	38,590	151,757	31,206	32,794	30,299	32,715	127,014
Costs and expenses	38,527	40,495	38,996	40,319	158,337	31,342	32,744	30,252	35,098	129,436
Merger, restructuring and other expenses	—	—	—	3,562	3,562	668	789	1,804	2,142	5,403
Write-off of purchased in-process technology	—	—	—	600	600	—	—	—	1,500	1,500
Asset impairment charges	—	—	—	816	816	—	—	—	—	—
Operating (loss) income	(1,729)	420	(3,542)	(6,707)	(11,558)	(804)	(739)	(1,757)	(6,025)	(9,325)
Interest expense, net	2,199	2,239	1,793	2,239	8,470	1,767	1,886	2,050	2,108	7,811
Loss before income taxes	(3,928)	(1,819)	(5,335)	(8,946)	(20,028)	(2,571)	(2,625)	(3,807)	(8,133)	(17,136)
Income tax (benefit) provision	(1,218)	(162)	(3,162)	47,069	42,527	(874)	(1,490)	(1,692)	(3,333)	(7,389)
Net loss	\$ (2,710)	\$ (1,657)	\$ (2,173)	\$ (56,015)	\$ (62,555)	\$ (1,697)	\$ (1,135)	\$ (2,115)	\$ (4,800)	\$ (9,747)
<b>Loss per common share:</b>										
Net loss per common share	\$ (0.09)	\$ (0.06)	\$ (0.07)	\$ (1.88)	\$ (2.11)	\$ (0.06)	\$ (0.04)	\$ (0.07)	\$ (0.16)	\$ (0.33)
Weighted average shares outstanding	29,569	29,649	29,670	29,718	29,650	29,224	29,247	29,262	29,316	29,263
Diluted weighted average shares outstanding	29,569	29,649	29,670	29,718	29,650	29,224	29,247	29,262	29,316	29,263

(1)

The quarterly information for the first three quarters of 2004 noted above has been restated from that previously filed on the Quarterly Reports on Form 10-Q. See table set forth below and Note 10 to the Consolidated Financial Statements.

The table set forth below shows the adjustments to the quarterly information that was previously filed on the Quarterly Reports on Form 10-Q for each of the three month periods ended March 31, 2004, June 30, 2004, and September 30, 2004.

	Q1 2004 as filed	Adjust- ments (1)	Q1 2004 restated	Q2 2004 as filed	Adjust- ments (2)	Q2 2004 restated	Q3 2004 as filed	Adjust- ments (3)	Q3 2004 restated
Net sales	\$ 94,487	\$ (3,624)	\$ 90,863	\$ 102,884	\$ (3,638)	\$ 99,246	\$ 92,367	5,000	\$ 97,367
Cost of sales	54,649	(584)	54,065	57,541	790	58,331	53,634	8,279	61,913
Gross profit	39,838	(3,040)	36,798	45,343	(4,428)	40,915	38,733	(3,279)	35,454
Costs and expenses	38,767	(240)	38,527	40,647	(152)	40,495	39,145	(149)	38,996
Operating income (loss)	1,071	(2,800)	(1,729)	4,696	(4,276)	420	(412)	(3,130)	(3,542)
Interest expense, net	2,199	—	2,199	2,239	—	2,239	1,793	—	1,793
(Loss) income before income taxes	(1,128)	(2,800)	(3,928)	2,457	(4,276)	(1,819)	(2,205)	(3,130)	(5,335)
Income tax (benefit) provision	(424)	(794)	(1,218)	876	(1,038)	(162)	(750)	(2,412)	(3,162)
Net loss	(704)	(2,006)	(2,710)	1,581	(3,238)	(1,657)	(1,455)	(718)	(2,173)
<b>Loss per common share:</b>									
Net loss per common share	\$ (0.02)	\$ (0.07)	\$ (0.09)	\$ 0.05	\$ (0.11)	\$ (0.06)	\$ (0.05)	\$ (0.02)	\$ (0.07)
Weighted average shares outstanding	29,569		29,569	29,649		29,649	29,670		29,670
Diluted weighted average shares outstanding	29,569		29,569	29,649		29,649	29,670		29,670

1.

The \$3.6 million reduction in revenue principally results from revenue recognition adjustments for certain system shipments. In each case the revenue for these systems was recognized in the following quarter. The \$0.6 million decrease in cost of sales results from a \$2.5 million decrease due to the revenue recognition adjustments described above partially offset by \$1.9 million in adjustments principally to inventory, accounts payable and certain accrued expenses. The decrease in costs and expenses of \$0.2 million principally relates to the over accrual of certain operating expenses. The \$0.8 million adjustment to income tax benefit is to reflect the tax benefit resulting from the pre-tax adjustments.



2.

The \$3.6 million net reduction in revenue principally results from revenue recognition adjustments for certain shipments. Approximately \$7.2 million of revenue that was previously recognized in the second quarter of 2004 was reversed and properly recognized in the third quarter of 2004, which was partially offset by revenue of \$3.6 million that was previously recognized in the first quarter that was reversed and properly recognized in the second quarter of 2004. The \$0.8 million increase in cost of sales results from \$3.2 million of adjustments in inventory, accounts payable, and accrued expenses, partially offset by a \$2.4 million cost of sales reduction related to the \$3.6 million net reduction in revenues. The decrease in costs and expenses of \$0.2 million principally relates to the over accrual of certain operating expenses. The \$1.0 million adjustment to the income tax provision is to reflect the tax benefit resulting from the pre-tax adjustments.

3.

The \$5.0 million increase in revenue principally relates to revenue recognition adjustments for certain system shipments. Approximately \$7.2 million of revenue, previously recognized in the second quarter of 2004, was reversed and properly recognized in the third quarter of 2004, which was partially offset by \$2.2 million of revenue that was previously recognized in the third quarter that was reversed and properly recognized in the fourth quarter of 2004. The \$8.3 million increase in cost of sales results from a \$3.8 million increase related to the net increase in revenues and the balance of \$4.5 million resulting from adjustments in inventory, accounts payable and accrued expenses. The decrease in costs and expenses of \$0.1 million principally relates to the over accrual of certain operating expenses. The \$2.4 million adjustment to the income tax benefit is to reflect the tax benefit resulting from the pre-tax adjustments.

A variety of factors influence the level of the Company's net sales in a particular quarter including economic conditions in the semiconductor, data storage HB-LED/wireless industries, the timing of significant orders, shipment delays, specific feature requests by customers, the introduction of new products by the Company and its competitors, production and quality problems, changes in material costs, disruption in sources of supply, seasonal patterns of capital spending by customers, and other factors, many of which are beyond the Company's control. In addition, the Company derives a substantial portion of its revenues from the sale of products which have an average selling price in excess of \$750,000. As a result, the timing of recognition of revenue from a single transaction could have a significant impact on the Company's net sales and operating results in any given quarter.

#### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

#### **Item 9A. Controls and Procedures.**

##### **Evaluation of Disclosure Controls and Procedures**

The Company's senior management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rule 13a-14 and 15d-14 under the Securities Exchange Act of 1934 (the "Exchange Act")) designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

The Company has evaluated the effectiveness of the design and operation of its disclosure controls and procedures under the supervision of and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective in timely alerting them to material information required to be included in our periodic Securities and Exchange Commission filings.

Subsequent to that evaluation there have been no significant changes in our internal controls or other factors that could significantly affect these controls after such evaluation.



**Design and Evaluation of Internal Control Over Financial Reporting**

As required by SEC Rule 13a-15(b), Veeco conducted an evaluation, under the supervision and with the participation of Veeco's management, including Veeco's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the fiscal period covered by this report and evaluated the Company's internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f). As a result of the discovery by management of improper accounting entries made at its TurboDisc business unit which led to adjustments requiring the restatement of the Company's financial statements for the quarterly periods ended March 31, 2004, June 30, 2004 and September 30, 2004, management has now determined that a deficiency existed in the internal control over financial reporting at the end of such quarterly periods. Since November 10, 2003, the date of the acquisition of the assets constituting the TurboDisc business unit, the business unit was operating under a legacy accounting system which was under the supervision of one individual and did not provide management with the depth of information Veeco is typically accustomed to. Management determined to institute a new accounting system at the business unit and in the course of the final implementation of such system in the quarter ended December 31, 2004, the improper accounting entries were discovered. Management believes that the new accounting system and attendant control process, together with the replacement of financial personnel at the TurboDisc business unit has remedied the deficiency in control over financial reporting that lead to the restatement and that the Company maintained effective internal control over financial reporting as of December 31, 2004.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we have included a report of management's assessment of the design and effectiveness of its internal controls as part of this Annual Report on Form 10-K for the year ended December 31, 2004. Our independent registered public accounting firm also attested to, and reported on, management's assessment of the effectiveness of internal control over financial reporting. Management's report and the independent registered public accounting firm's attestation report are included in our 2004 Financial Statements under the captions entitled "Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting."

**Changes in Internal Control Over Financial Reporting**

The changes in the Company's internal control over financial reporting during the quarter ended December 31, 2004 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting consisted of the implementation of the new accounting system and attendant control process and the replacement of financial personnel at the Company's TurboDisc business unit.

**Item 9B. Other Information.**

None.



**Item 10. Directors and Executive Officers of the Registrant.**

Reference is made to the Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's fiscal year for information concerning directors and executive officers of the Registrant.

Veeco has adopted a Code of Ethics for Senior Officers (the "Code") which applies to its chief executive officer, president, principal financial officer, principal accounting officer and persons performing similar functions. A copy of the Code can be found on Veeco's website ([www.veeco.com](http://www.veeco.com)). Veeco intends to disclose on its website the nature of any future amendments to and waivers of the Code that apply to the chief executive officer, president, principal financial officer, principal accounting officer or persons performing similar functions. The website address above is intended to be an inactive, textual reference only. None of the material on this website is part of this report.

**Item 11. Executive Compensation.**

Reference is made to the Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's fiscal year for information concerning executive compensation.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

Reference is made to the Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's fiscal year for information concerning security ownership of each person known by the Company to own beneficially more than 5% of the outstanding shares of common stock, of each director of the Company and all executive officers and directors as a group.

**Item 13. Certain Relationships and Related Transactions.**

Reference is made to the Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's fiscal year for information concerning certain relationships and related transactions.

**Item 14. Principal Accountants Fees and Services**

Reference is made to the Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's fiscal year for information concerning principal accountants fees and services.



**Item 15. Exhibits and Financial Statement Schedules.**

(a)

The Registrant's financial statements together with a separate table of contents are annexed hereto. The financial statement schedule is listed in the separate table of contents annexed hereto.

(b)

Exhibits

Unless otherwise indicated, each of the following exhibits has been previously filed with the Securities and Exchange Commission by the Company under File No. 0-16244.

Number	Exhibit	Incorporated by Reference to the Following Documents
3.1	Amended and Restated Certificate of Incorporation of the Company dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 1997, Exhibit 3.1
3.2	Amendment to Certificate of Incorporation of Veeco dated May 29, 1998.	Annual Report on Form 10-K for the year ended December 31, 2000, Exhibit 3.2
3.3	Amendment to Certificate of Incorporation of Veeco dated May 5, 2000.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 3.1
3.4	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of Veeco.	Quarterly Report on Form 10-Q for the Quarter Ended March 31, 2001, Exhibit 3.1
3.5	Third Amended and Restated Bylaws of the Company, effective October 26, 2000.	Registration Statement on Form S-8 (File No. 333-49476), filed November 7, 2000, Exhibit 4.3
4.1	Rights Agreement, dated as of March 13, 2001, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as Rights Agent, including the form of the Certificate of Designation, Preferences and Rights setting forth the terms of the Series A Junior Participating Preferred Stock, par value \$0.01 per share, as Exhibit A, the form of Rights Certificates as Exhibit B and the Summary of Rights to Purchase Preferred Stock as Exhibit C.	Registration Statement on Form 8-A dated March 15, 2001, Exhibit 1
4.2	Amendment to Rights Agreement, dated as of September 6, 2001, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as rights agent.	Current Report on Form 8-K, filed September 21, 2001, Exhibit 4.1
4.3	Amendment No 2 to Rights Agreement, dated as of July 11, 2002, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as rights agent.	Current Report on Form 8-K, filed July 12, 2002, Exhibit 4.1



- 4.4 Indenture between Veeco and State Street Bank and Trust Company, N.A., as trustee, dated December 21, 2001, relating to the 4<sup>1</sup>/<sub>8</sub>% convertible subordinated notes due 2008. Registration Statement on Form S-3 (File No. 333-84252), filed March 13, 2002, Exhibit 4.1
- 10.1 Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2001, Exhibit 10.1
- 10.2 Amendment and Waiver dated as of September 17, 2001 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.1
- 10.3 Consent and Second Amendment dated as of December 21, 2001 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.3
- 10.4 Third Amendment dated as of February 7, 2002 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.4
- 10.5 Fourth Amendment dated as of March 20, 2002 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.5



- 10.6 Fifth Amendment dated as of February 5, 2003 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2002, Exhibit 10.6
- 10.7 Sixth Amendment dated as of October 30, 2003 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-K for the Quarter Ended September 30, 2003, Exhibit 10.1
- 10.8 Seventh Amendment dated as of February 5, 2004 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2003, Exhibit 10.8
- 10.9 Eighth Amendment dated as of August 25, 2004, effective June 30, 2004, to the Credit Agreement dated as of April 19, 2001, as amended, among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent, and the lenders named therein. Current Report on Form 8-K, filed August 31, 2004, Exhibit 10.1
- 10.10 Ninth Amendment dated as of October 4, 2004, to the Credit Agreement dated as of April 19, 2001, as amended, among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent, and the lenders named therein. Filed herewith
- 10.11 Security Agreement dated as of March 20, 2002 among Veeco Instruments Inc., the subsidiaries of Veeco named therein and Fleet National Bank, as administrative agent. Quarterly Report on Form 10-Q for the Quarter Ended March 31, 2002, Exhibit 10.3
- 10.12 Loan Agreement dated as of December 15, 1999 between Applied Epi, Inc. and Jackson National Life Insurance Company. Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.2



10.13	Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2002, Exhibit 10.2
10.14	Promissory Note dated as of December 15, 1999 issued by Applied Epi, Inc. to Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.3
10.15	* Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan.	Registration Statement on Form S-1 (File No. 33-93958), Exhibit 10.20
10.16	* Amendment dated May 15, 1997 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan.	Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.1
10.17	* Amendment dated July 25, 1997 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan.	Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.2
10.18	* Amendment dated May 29, 1998 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan.	Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.1
10.19	* Amendment dated May 14, 1999 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan.	Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.2
10.20	* Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors.	Registration Statement on Form S-1 (File No. 33-85184), Exhibit 10.17
10.21	* Amendment dated May 15, 1996 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors.	Registration Statement on Form S-8 (File No. 333-08981) filed July 26, 1996, Exhibit 10.2
10.22	* Amendment dated May 15, 1997 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors.	Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.3
10.23	* Amendment dated May 21, 1999 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors.	Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.3
10.24	* Veeco Instruments Inc. First Amended and Restated Employee Stock Purchase Plan, dated October 26, 2000.	Annual Report on Form 10-K for the Year Ended December 31, 2000, Exhibit 10.18
10.25	* Amendment No. 1 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective January 1, 2003.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2003, Exhibit 10.1
10.26	* Amendment No. 2 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective May 7, 2004.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2004, Exhibit 10.1



10.27	* Amendment No. 3 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective January 1, 2005.	Filed herewith
10.28	* Veeco Instruments Inc. 2000 Stock Incentive Plan (amending and restating the Veeco Instruments Inc. 2000 Stock Option Plan, as amended) effective May 7, 2004.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2004, Exhibit 10.2
10.29	* Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees.	Registration Statement on Form S-8 (File Number 333-49476) filed November 7, 2000, Exhibit 4.4
10.30	* Amendment No. 1 to the Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees, effective dated July 26, 2001.	Registration Statement on Form S-8 (File Number 333-66574) filed August 2, 2001, Exhibit 4.2
10.31	* Applied Epi, Inc. 1993 Stock Option Plan.	Registration Statement on Form S-8 (File Number 333-69554) filed on September 18, 2001, Exhibit 4.1
10.32	* Form of Applied Epi, Inc. Non-Qualified Restricted Stock Option Agreement.	Registration Statement on Form S-8 (File Number 333-69554) filed on September 18, 2001, Exhibit 4.3
10.33	Form of Warrant to Purchase Shares of Common Stock of Applied Epi, Inc. (assumed in connection with the Applied Epi merger and now exercisable for shares of common stock of Veeco Instruments Inc.)	Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 4.6
10.34	* Employment Agreement dated as of April 1, 2003 between Edward H. Braun and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.3
10.35	* Employment Agreement dated as of April 1, 2003 between Don R. Kania and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.4
10.36	* Employment Agreement dated as of April 1, 2003 between John F. Rein, Jr. and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.5
10.37	* Letter Agreement dated January 21, 2004 between the Company and John P. Kiernan.	Annual Report on Form 10-K for the Year Ended December 31, 2003, Exhibit 10.38
10.38	* Letter Agreement dated July 7, 2004 supplementing letter agreement dated April 1, 2003, between the Company and John K. Bulman	Filed herewith
21.1	Subsidiaries of the Registrant.	Filed herewith
23.1	Consent of Ernst & Young LLP.	Filed herewith



- |      |   |                |
|------|---|----------------|
| 31.1 | Certification of Chief Executive Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.                 | Filed herewith |
|      |   |                |
| 31.2 | Certification of Chief Financial Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.                 | Filed herewith |
|      |   |                |
| 32.1 | Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | Filed herewith |
|      |   |                |
| 32.2 | Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | Filed herewith |

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\*

Indicates a management contract or compensatory plan or arrangement, as required by Item 15(a)(3) of Form 10-K.



## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 15, 2005.

Veeco Instruments Inc.

By: /s/ EDWARD H. BRAUN

Edward H. Braun  
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated, on March 15, 2005.

Signature	Title
<u>/s/ EDWARD H. BRAUN</u> Edward H. Braun	Director, Chairman and Chief Executive Officer (principal executive officer)
<u>/s/ RICHARD A. D'AMORE</u> Richard A. D'Amore	Director
<u>/s/ JOEL A. ELFTMANN</u> Joel A. Elftmann	Director
<u>/s/ HEINZ K. FRIDRICH</u> Heinz K. Fridrich	Director
<u>/s/ DOUGLAS A. KINGSLEY</u> Douglas A. Kingsley	Director
<u>/s/ PAUL R. LOW</u> Paul R. Low	Director
<u>/s/ ROGER D. MCDANIEL</u> Roger D. McDaniel	Director
<u>/s/ IRWIN H. PFISTER</u> Irwin H. Pfister	Director
<u>/s/ WALTER J. SCHERR</u> Walter J. Scherr	Director



/s/ PETER J. SIMONE

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Peter J. Simone

Director

/s/ JOHN F. REIN, JR.

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John F. Rein, Jr.

Executive Vice President, Chief Financial Officer and Secretary (principal financial officer)

/s/ JOHN P. KIERNAN

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John P. Kiernan

Vice President, Finance and Corporate Controller (principal accounting officer)



**Veeco Instruments Inc. and Subsidiaries**  
**Index to Consolidated Financial Statements**  
**and Financial Statement Schedule**

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**MANAGEMENT'S REPORT ON INTERNAL  
CONTROL OVER FINANCIAL REPORTING**

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The Company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002, management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2004. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework*.

Based on our assessment and those criteria, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2004.

The Company's independent registered public accounting firm, Ernst & Young LLP, has audited management's assessment of the Company's internal control over financial reporting as of December 31, 2004, and their report is shown on page F-3.

Veeco Instruments Inc.  
Woodbury, NY  
March 15, 2005

/s/ EDWARD H. BRAUN

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Edward H. Braun  
Chairman and Chief Executive Officer  
Veeco Instruments Inc.  
March 15, 2005

/s/ JOHN F. REIN, JR.

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John F. Rein, Jr.  
Executive Vice President,  
Chief Financial Officer and Secretary  
Veeco Instruments Inc.  
March 15, 2005



Report of Independent Registered Public Accounting Firm on  
Internal Control Over Financial Reporting

**The Board of Directors and Shareholders of Veeco Instruments Inc.**

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that Veeco Instruments Inc. and Subsidiaries (the "Company") maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that the Company maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2004 consolidated financial statements of the Company and our report dated March 15, 2005 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

New York, New York  
March 15, 2005



To the Shareholders and the Board of Directors  
Veeco Instruments Inc.

We have audited the accompanying consolidated balance sheets of Veeco Instruments Inc. and Subsidiaries (the "Company") as of December 31, 2004 and 2003, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2004. Our audits also included the financial statement schedule in the accompanying Index. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2004 and 2003, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Veeco Instruments Inc. internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 15, 2005 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

New York, New York  
March 15, 2005



Veeco Instruments Inc. and Subsidiaries  
**Consolidated Balance Sheets**  
(Dollars in thousands)

	December 31,	
	2004	2003
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 100,276	\$ 106,830
Accounts receivable, less allowance for doubtful accounts of \$2,420 in 2004 and \$2,458 in 2003	85,914	69,890
Inventories	110,643	97,622
Prepaid expenses and other current assets	9,039	15,823
Deferred income taxes	3,096	24,693
Total current assets	308,968	314,858
Property, plant and equipment at cost, net	73,513	72,742
Goodwill	94,645	72,989
Purchased technology, less accumulated amortization of \$39,181 in 2004 and \$25,519 in 2003	68,587	79,449
Other intangible assets, less accumulated amortization of \$19,702 in 2004 and \$14,899 in 2003	25,007	25,242
Long-term investments	3,541	12,376
Deferred income taxes	—	18,136
Other assets	2,652	672
Total assets	\$ 576,913	\$ 596,464
<b>Liabilities and shareholders' equity</b>		
Current liabilities:		
Accounts payable	\$ 25,476	\$ 19,603
Accrued expenses	63,438	31,616
Deferred profit	1,196	2,140
Income taxes payable	1,702	3,700
Current portion of long-term debt	354	333
Total current liabilities	92,166	57,392
Long-term debt	229,581	229,935
Other liabilities	2,814	2,808
Shareholders' equity:		
Preferred stock, 500,000 shares authorized; no shares issued and outstanding	—	—
Common stock, 60,000,000 shares authorized; 29,848,271 and 29,513,816 shares issued and outstanding in 2004 and 2003, respectively	298	295
Additional paid-in capital	371,472	365,757
Accumulated deficit	(127,548)	(64,993)
Accumulated comprehensive income	8,130	5,270
Total shareholders' equity	252,352	306,329
Total liabilities and shareholders' equity	\$ 576,913	\$ 596,464

See accompanying notes.



Veeco Instruments Inc. and Subsidiaries  
**Consolidated Statements of Operations**  
(In thousands, except per share data)

	Year ended December 31,		
	2004	2003	2002
Net sales	\$ 390,443	\$ 279,321	\$ 298,885
Cost of sales	238,686	152,307	183,042
Gross profit	151,757	127,014	115,843
Costs and expenses:			
Selling, general and administrative expense	82,511	67,986	75,899
Research and development expense	58,338	48,868	53,889
Amortization expense	18,465	13,800	13,323
Merger, restructuring and other expenses	3,562	5,403	11,248
Asset impairment charges	816	—	99,663
Write-off of purchased in-process technology	600	1,500	—
Other income, net	(977)	(1,218)	(284)
	163,315	136,339	253,738
Operating loss	(11,558)	(9,325)	(137,895)
Interest expense	10,250	10,326	10,535
Interest income	(1,780)	(2,515)	(4,533)
Loss from continuing operations before income taxes	(20,028)	(17,136)	(143,897)
Income tax provision (benefit) from continuing operations	42,527	(7,389)	(20,513)
Loss from continuing operations	(62,555)	(9,747)	(123,384)
Discontinued operations:			
Loss on disposal, net of taxes	—	—	(346)
Net loss	\$ (62,555)	\$ (9,747)	\$ (123,730)
Loss per common share:			
Loss per common share from continuing operations	\$ (2.11)	\$ (0.33)	\$ (4.24)
Loss from discontinued operations	—	—	(0.01)
Net loss per common share	\$ (2.11)	\$ (0.33)	\$ (4.25)
Diluted loss per common share from continuing operations	\$ (2.11)	\$ (0.33)	\$ (4.24)
Loss from discontinued operations	—	—	(0.01)
Diluted net loss per common share	\$ (2.11)	\$ (0.33)	\$ (4.25)
Weighted average shares outstanding	29,650	29,263	29,096
Diluted weighted average shares outstanding	29,650	29,263	29,096

See accompanying notes.



Veeco Instruments Inc. and Subsidiaries  
**Consolidated Statements of Shareholders' Equity**  
(Dollars in thousands)

	Common Stock		Additional Paid-In Capital	Retained Earnings (Accumulated Deficit)	Accumulated Comprehensive (Loss) Income	Total	Comprehensive Income (Loss)
	Shares	Amount					
Balance at December 31, 2001	29,006,706	\$ 290	\$ 359,007	\$ 68,484	\$ (3,810)	\$ 423,971	\$ 8,618
Exercise of stock options and stock issuances under stock purchase plan	214,668	2	1,761	—	—	1,763	—
Stock option income tax benefit	—	—	1,173	—	—	1,173	—
Translation adjustment	—	—	—	—	4,493	4,493	4,493
Minimum pension liability, net of tax effect	—	—	—	—	(97)	(97)	(97)
Net loss	—	—	—	(123,730)	—	(123,730)	(123,730)
Balance at December 31, 2002	29,221,374	292	361,941	(55,246)	586	307,573	\$ (119,334)
Exercise of stock options and stock issuances under stock purchase plan	292,442	3	2,966	—	—	2,969	—
Stock option income tax benefit	—	—	850	—	—	850	—
Translation adjustment	—	—	—	—	4,719	4,719	4,719
Minimum pension liability, net of tax effect	—	—	—	—	(35)	(35)	(35)
Net loss	—	—	—	(9,747)	—	(9,747)	(9,747)
Balance at December 31, 2003	29,513,816	295	365,757	(64,993)	5,270	306,329	\$ (5,063)
Exercise of stock options and stock issuances under stock purchase plan	334,455	3	5,715	—	—	5,718	—
Translation adjustment	—	—	—	—	2,834	2,834	2,834
Minimum pension liability, net of tax effect	—	—	—	—	26	26	26
Net loss	—	—	—	(62,555)	—	(62,555)	(62,555)
Balance at December 31, 2004	29,848,271	\$ 298	\$ 371,472	\$ (127,548)	\$ 8,130	\$ 252,352	\$ (59,695)

See accompanying notes.



Veeco Instruments Inc. and Subsidiaries  
**Consolidated Statements of Cash Flows**  
(In thousands)

	Year ended December 31,		
	2004	2003	2002
<b>Operating activities</b>			
Net loss	\$ (62,555)	\$ (9,747)	\$ (123,730)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Non-cash merger and restructuring expenses	1,316	—	114,664
Depreciation and amortization	31,264	24,858	27,929
Deferred income taxes	39,864	(1,370)	(22,643)
Stock option income tax benefit	—	850	1,173
Loss on disposal of discontinued operations	—	—	346
Write-off of purchased in-process technology	600	1,500	—
Other	73	(451)	613
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable	(12,630)	13,325	23,139
Inventories	(10,236)	8,112	3,553
Accounts payable	5,178	3,199	(6,960)
Accrued expenses, deferred profit and other current liabilities	7,522	(22,097)	(26,230)
Other, net	603	3,591	5,989
Net cash provided by (used in) operating activities	999	21,770	(2,157)
<b>Investing activities</b>			
Capital expenditures	(15,476)	(8,077)	(8,644)
Proceeds from sale of property, plant and equipment and assets held for sale	4,395	2,833	1,790
Proceeds from sale of businesses	—	—	3,750
Payments for net assets of businesses acquired	(10,500)	(131,105)	—
Purchase of long-term investments	—	(3,500)	(2,585)
Maturities of long-term investments	8,835	8,607	8,621
Net cash (used in) provided by investing activities	(12,746)	(131,242)	2,932
<b>Financing activities</b>			
Proceeds from stock issuances	5,718	2,969	1,763
Proceeds from long-term debt	—	—	20,000
Repayments of long-term debt and borrowings under lines of credit	(333)	(317)	(8,478)
Payments for debt issuance costs	—	—	(1,279)
Net cash provided by financing activities	5,385	2,652	12,006
Effect of exchange rate changes on cash and cash equivalents	(192)	(645)	(1,640)
Net (decrease) increase in cash and cash equivalents	(6,554)	(107,465)	11,141
Cash and cash equivalents at beginning of year	106,830	214,295	203,154
Cash and cash equivalents at end of year	\$ 100,276	\$ 106,830	\$ 214,295

See accompanying notes.



## Notes to Consolidated Financial Statements

December 31, 2004

**1. Description of Business and Significant Accounting Policies***Business*

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco" or the "Company") designs, manufactures, markets and services a broad line of equipment primarily used by manufacturers in the data storage, semiconductor, wireless and HB-LED (high brightness light emitting diode) industries. These industries help create a wide range of information age products such as computer integrated circuits, personal computers, hard disk drives, network servers, digital cameras, wireless phones, TV set-top boxes and personal digital assistants. Veeco's broad line of products features leading edge technology and allows customers to improve time-to-market of their next generation products. Veeco's products are also enabling advancements in the growing field of nanoscience and other areas of scientific and industrial research.

Veeco's process equipment products precisely deposit or remove (etch) various materials in the manufacturing of advanced thin film magnetic heads ("TFMHs") for the data storage industry, semiconductor deposition of mask reticles, compound semiconductor/wireless and LED devices. During 2004, the Company split out the former process equipment segment into two separate reportable segments. The first segment, called "Ion Beam and Mechanical Process Equipment," combines the etch, deposition and dicing and slicing products sold mostly to data storage customers. The second segment, called "Epitaxial Process Equipment," includes the Molecular Beam Epitaxy ("MBE") and Metal Organic Chemical Vapor Deposition ("MOCVD") products primarily sold to HB-LED and wireless telecommunications customers. As such, the Company has restated the segment information for prior periods as if the composition of its reportable segments described above had existed in such prior periods. Veeco's metrology equipment is used to provide critical surface measurements on semiconductor devices and TFMHs. This equipment allows customers to monitor their products throughout the manufacturing process in order to improve yields, reduce costs and improve product quality. Veeco's metrology solutions are also used by many universities, scientific laboratories and industrial applications. Veeco sells its broad line of atomic force microscopes ("AFM"), optical interferometers and stylus profilers to thousands of research facilities and scientific centers worldwide.

*Use of Estimates*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

*Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of Veeco and its subsidiaries. Intercompany items and transactions have been eliminated in consolidation.

*Revenue Recognition*

The Company recognizes revenue in accordance with Securities and Exchange Commission ("SEC") Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition*, which superseded the earlier related guidance in SAB No. 101, *Revenue Recognition in Financial Statements*. Certain of our product



sales are accounted for as multiple-element arrangements in accordance with EITF 00-21, *Revenue Arrangements with Multiple Deliverables*. A multiple-element arrangement is a transaction which may involve the delivery or performance of multiple products, services, or rights to use assets, and performance may occur at different points in time or over different periods of time.

The Company recognizes revenue when persuasive evidence of an arrangement exists, the seller's price is fixed or determinable and collectibility is reasonably assured.

For products produced according to the Company's published specifications, where no installation is required or installation is deemed perfunctory and no substantive customer acceptance provisions exist, revenue is recognized when title passes to the customer, generally upon shipment.

For products produced according to a particular customer's specifications, revenue is recognized when the product has been tested and it has been demonstrated that it meets the customer's specifications and title passes to the customer. The amount of revenue recorded is reduced by the amount of any customer retention (generally 10% to 20%), which is not payable by the customer until installation is completed and final customer acceptance is achieved. Installation is not deemed to be essential to the functionality of the equipment since installation does not involve significant changes to the features or capabilities of the equipment or building complex interfaces and connections. In addition, the equipment could be installed by the customer or other vendors and generally the cost of installation approximates only 1% to 2% of the sales value of the related equipment.

For new products, new applications of existing products, or for products with substantive customer acceptance provisions where performance cannot be fully assessed prior to meeting customer specifications at the customer site, revenue is recognized upon completion of installation and receipt of final customer acceptance. Since title to goods generally passes to the customer upon shipment and 80% to 90% of the contract amount becomes payable at that time, inventory is relieved and accounts receivable is recorded for the amount billed at the time of shipment. The profit on the amount billed for these transactions is deferred and recorded as deferred profit in the accompanying balance sheets. At December 31, 2004 and 2003, \$1.2 million and \$2.1 million, respectively, are recorded in deferred profit.

Service and maintenance contract revenues are recorded as deferred revenue, which is included in other accrued expenses, and recognized as revenue on a straight-line basis over the service period of the related contracts.

#### *Cash Flows*

The Company considers all highly liquid investments with maturity of three months or less when purchased to be cash equivalents. Interest paid during 2004, 2003 and 2002 was approximately \$10.2 million, \$10.3 million and \$11.5 million, respectively. Income taxes paid in 2004, 2003 and 2002 were approximately \$4.3 million, \$1.5 million and \$7.1 million, respectively.

During the year ended December 31, 2004, the Company had non-cash items excluded from the Consolidated Statement of Cash Flows of approximately \$18.0 million. This amount consists of (1) \$13.1 million for the accrual of a contingent earn-out payment to Emcore, the former owner of TurboDisc, resulting from the achievement of certain revenue targets which is payable in the first half



of 2005 and has been reflected as additional goodwill; (2) \$1.9 million for the accrual of a contingent earn-out payment to the former shareholders of Nanodevices related to the achievement of certain revenue targets, which is payable in the first quarter of 2005 and has been recorded as additional goodwill; (3) \$1.5 million for the transfer of other current assets to property, plant and equipment; (4) \$0.4 million for the transfer of inventory to property, plant and equipment; and (5) during 2004, the carrying value of the fixed assets relating to the Aii acquisition was reduced by \$1.1 million, which resulted in a corresponding increase recorded to goodwill.

#### *Inventories*

Inventories are stated at the lower of cost (principally first-in, first-out method) or market.

#### *Depreciable Assets*

Depreciation and amortization are generally computed by the straight-line method and are charged against income over the estimated useful lives of depreciable assets. Leasehold improvements are amortized over the lesser of the useful life of the leasehold improvement or the lease term.

#### *Long-Lived Assets*

Effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 144, *Accounting for the Impairment or Disposal of Long Lived Assets*, which addresses financial accounting and reporting for the impairment or disposal of long-lived assets and supersedes SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed Of*, and the accounting and reporting provisions of APB Opinion No. 30, *Reporting the Results of Operations for a Disposal of a Segment of a Business*. See Note 7, *Merger, Restructuring and Other Expenses* for discussion of the impact of the charges recorded under SFAS No. 144.

Intangible assets consist of customer related intangible assets, purchased technology, patents, trademarks, covenants not-to-compete, software licenses and deferred finance costs. Intangible assets are amortized over periods ranging from 6 months to 17 years using the straight-line method. The estimated aggregate amortization expense for intangible assets with definite lives for each of the next five fiscal years is as follows (in thousands):

2005	\$	16,567
2006	\$	16,002
2007	\$	10,525
2008	\$	7,683
2009	\$	5,675

Costs of applying for and registering specific patents, as well as for the defense of patents are classified as other intangible assets in the consolidated balance sheets of the Company. As of December 31, 2004 and 2003, the Company had net capitalized patent costs of \$2.9 million and \$1.2 million, respectively.

The carrying values of intangible and other long-lived assets are periodically reviewed to determine if any impairment indicators are present. If it is determined that such indicators are present and the



review indicates that the assets will not be fully recoverable, based on undiscounted estimated cash flows over the remaining amortization and depreciation periods, the carrying value of such assets are reduced to estimated fair value. Impairment indicators include, among other conditions, cash flow deficits, an historic or anticipated decline in revenue or operating profit, adverse legal or regulatory developments, and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. During 2004, 2003 and 2002 approximately \$0.8 million, \$0.0 million and \$5.3 million, respectively, of impairment charges relating to property, plant and equipment and other long-lived assets were recorded (see Note 7).

#### *Goodwill*

The Company implemented SFAS No. 142, *Goodwill and Other Intangible Assets* on January 1, 2002. Under the provisions of this standard, the intangible assets that are classified as goodwill and those with indefinite lives are no longer amortized. Intangible assets with definite lives continue to be amortized over their estimated useful life. SFAS No. 142 also requires that an impairment test be performed to support the carrying value of goodwill and indefinite lived intangible assets at least annually. The Company's policy is to perform this annual impairment test in the fourth quarter of each fiscal year.

During the first quarter of 2002, the Company completed the first of the required impairment tests of goodwill and intangible assets with indefinite lives. Based upon the judgment of management, it was determined that there was no impairment to goodwill or intangibles assets with indefinite lives as of January 1, 2002.

The Company reviewed its business and determined that four reporting units should be reviewed for impairment in accordance with the standard. The four reporting units are Ion Beam and Mechanical Process Equipment (formerly referred to as Data Storage Equipment), Epitaxial Process Equipment (formerly referred to as Compound Semiconductor Equipment), AFM and Optical Metrology. Together, AFM and Optical Metrology comprise the Metrology operating segment.

During the fourth quarter of 2002, in accordance with SFAS No. 142, management evaluated whether any events and circumstances existed that would require goodwill of a reporting unit to be reviewed for impairment. Management determined that due to the continued weakness in the telecommunications industry and the uncertainty of the timing and speed of recovery, impairment indicators were present. In accordance with SFAS No. 142, if impairment indicators are present, the fair value of the reporting unit must be determined. Based upon the judgment of management, goodwill arising from the Applied Epi Inc. acquisition, which took place in September 2001 and is part of the epitaxial process equipment operating segment, was deemed significantly impaired. As a result, the Company recorded an impairment charge of \$94.4 million and wrote down goodwill related to the epitaxial process equipment reporting unit to approximately \$7.5 million as of December 31, 2002. The impairment to goodwill is included in asset impairment charges in the accompanying Consolidated Statement of Operations for the year ended December 31, 2002. The fair value of the epitaxial process equipment reporting unit was determined by using the income approach, which involves estimating discounted after-tax cash flows.



During the fourth quarter of 2004, the Company performed the required annual impairment test, and based upon the judgment of management, determined that no impairment exists.

Changes in the Company's goodwill during 2004 are as follows:

Balance as of January 1, 2004	\$	72,989
MTI Acquisition		4,463
Aii Purchase Price Allocation Adjustment		1,137
Nanodevices Earnout		2,910
Emcore Earnout		13,146
		<hr/>
Balance as of December 31, 2004	\$	94,645
		<hr/>

#### *Derivative Financial Instruments*

In April 2003, the FASB issued SFAS No. 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities*. SFAS No. 149 amends and clarifies financial accounting and reporting for hedging activities and derivative instruments including certain derivative instruments embedded in other contracts. SFAS No. 149 is effective for contracts entered into or modified after June 30, 2003. The adoption of SFAS No. 149 did not have a material impact on the Company's consolidated financial position or results of operations.

The Company uses derivative financial instruments to minimize the impact of foreign exchange rate changes on earnings and cash flows. In the normal course of business, the Company's operations are exposed to fluctuations in foreign exchange rates. In order to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known foreign currency exposures, the Company enters into monthly forward contracts. The Company does not use derivative financial instruments for trading or speculative purposes. The Company's forward contracts do not subject it to material risks due to exchange rate movements because gains and losses on these contracts are intended to offset exchange gains and losses on the underlying assets and liabilities; both the forward contracts and the underlying assets and liabilities are marked-to-market through earnings. The aggregate foreign currency exchange (loss) gain included in determining consolidated results of operations was approximately (\$0.2) million, \$0.1 million and \$0.1 million in 2004, 2003 and 2002, respectively. Included in the aggregate foreign currency exchange (loss) gain were gains (losses) relating to forward contracts of \$0.0 million, (\$0.4) million and (\$1.0) million in 2004, 2003 and 2002, respectively. These amounts were recorded and included in other income, net. As of December 31, 2004 and 2003, approximately \$0.1 million and \$0.3 million, respectively, of losses related to forward contracts were included in accrued expenses and subsequently paid in January 2005 and 2004, respectively. On December 30, 2004 and 2003, the Company entered into forward contracts for the month of January for the notional amounts of approximately \$16.8 million and \$19.1 million respectively, which approximated the fair market value at December 31, 2004 and 2003.



*Environmental Compliance and Remediation*

Environmental compliance costs include ongoing maintenance, monitoring and similar costs. Such costs are expensed as incurred. Environmental remediation costs are accrued when environmental assessments and/or remedial efforts are probable and the cost can be reasonably estimated.

*Foreign Operations*

Foreign currency denominated assets and liabilities are translated into U.S. dollars at the exchange rates existing at the balance sheet date. Resulting translation adjustments due to fluctuations in the exchange rates are recorded as a separate component of shareholders' equity. Income and expense items are translated at the average exchange rates during the respective periods.

*Research and Development Costs*

Research and development costs are charged to expense as incurred and include expenses for development of new technology and the transition of the technology into new products or services.

*Advertising Expense*

The cost of advertising is expensed as of the first showing of each advertisement. The Company incurred \$4.3 million, \$3.5 million and \$3.7 million in advertising costs during 2004, 2003 and 2002, respectively.

*Stock Based Compensation*

At December 31, 2004, the Company had four fixed stock option plans, which are described more fully in Note 5. In addition, the Company assumed certain stock option plans and agreements in connection with various acquisitions, as discussed in Note 5. The Company accounts for these stock option plans under the recognition and measurement principles of APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. No compensation expense is reflected in net loss as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. The following table illustrates the effect on net loss and loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123,



*Accounting for Stock-Based Compensation*, under which compensation expense would be recognized as incurred, to stock-based employee compensation.

	December 31,		
	2004	2003	2002
	(In thousands, except per share amounts)		
Net loss, as reported	\$ (62,555)	\$ (9,747)	\$ (123,730)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	18,499	15,407	27,845
Pro forma net loss	\$ (81,054)	\$ (25,154)	\$ (151,575)
Loss per share:			
Net loss per common share, as reported	\$ (2.11)	\$ (0.33)	\$ (4.25)
Net loss per common share, pro forma	\$ (2.73)	\$ (0.86)	\$ (5.21)
Diluted net loss per common share, as reported	\$ (2.11)	\$ (0.33)	\$ (4.25)
Diluted net loss per common share, pro forma	\$ (2.73)	\$ (0.86)	\$ (5.21)

#### *Fair Value of Financial Instruments*

The carrying amounts of the Company's financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued expenses, approximate fair value due to their short maturities. The carrying amount of the Company's long-term investments approximate fair value at December 31, 2004 and 2003.

The fair values of the Company's debt, including current maturities, are estimated using discounted cash flow analyses, based on the estimated current incremental borrowing rates for similar types of securities, or on market value for its publicly traded debt (see note 4).

#### *Loss Per Share*

Loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of common shares and common equivalent shares outstanding during the period. The effect of approximately 493,000, 337,000 and 254,000 common equivalent shares for the years ended December 31, 2004, 2003 and 2002, respectively, and the assumed conversion of subordinated convertible debentures into approximately 5.7 million common equivalent shares is antidilutive for 2004, 2003 and 2002 and therefore not included in the diluted weighted average shares outstanding.

#### *Other Recent Accounting Pronouncements*

On December 16, 2004, the FASB issued FASB Statement No. 123 (revised 2004), *Share-Based Payment*, which is a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*. Statement No. 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. Generally, the approach in Statement



No. 123(R) is similar to the approach described in Statement No. 123. However, Statement No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. Statement No. 123(R) must be adopted no later than July 1, 2005. Early adoption will be permitted in periods in which financial statements have not yet been issued. The Company expects to adopt Statement No. 123(R) on July 1, 2005.

Statement No. 123(R) permits public companies to adopt its requirements using one of two methods:

1.

A "modified prospective" method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of Statement No. 123(R) for all share-based payments granted after the effective date and (b) based on the requirements of Statement No. 123 for all awards granted to employees prior to the effective date of Statement No. 123(R) that remain unvested on the effective date.

2.

A "modified retrospective" method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under Statement No. 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

The Company has not yet determined whether it will adopt Statement No. 123(R) using the modified prospective method or the modified retrospective method.

As permitted by Statement No. 123, the Company currently accounts for share-based payments to employees using APB Opinion No. 25's intrinsic value method and, as such, generally recognizes no compensation cost for employee stock options. Accordingly, the adoption of Statement No. 123(R)'s fair value method will have a significant impact on consolidated results of operations, although it will have no impact on the Company's overall consolidated financial position. The impact of adoption of Statement No. 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had the Company adopted Statement No. 123(R) in prior periods, the impact of that standard would have approximated the impact of Statement No. 123 as described in the disclosure of pro forma net loss and net loss per common share in Note 1 to Veeco's Consolidated Financial Statements. Statement No. 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under current literature. This requirement will reduce consolidated net operating cash flows and increase consolidated net financing cash flows in periods after adoption. While the Company cannot estimate what those amounts will be in the future (because they depend on, among other things, when employees exercise stock options), the amount of consolidated operating cash flows recognized in prior periods for such excess tax deductions was \$0.9 million and \$1.2 million in 2003 and 2002, respectively.



In November 2004, the FASB issued Statement No. 151, *Inventory Costs- an amendment to ARB No. 43, Chapter 4*. Statement No. 151 clarifies the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal," as previously stated in ARB No. 43. In addition, this Statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The provisions of this Statement shall be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not expect that the adoption of this Statement will have a significant impact on the Company's consolidated financial position or results of operations.

#### *Reclassifications*

Certain amounts in the 2003 and 2002 consolidated financial statements have been reclassified to conform to the 2004 presentation.

## **2. Business Combinations and Basis of Presentation**

#### *Manufacturing Technology, Inc.*

On October 5, 2004, the Company acquired substantially all of the assets and assumed certain liabilities of Manufacturing Technology Inc. ("MTI") based in Ventura, California, for \$9.5 million in cash. The MTI business includes the assets necessary for engineering, design and manufacturing of slicing and dicing systems ranging from R&D to high-volume production systems, and MTI's intellectual property. Additionally, the Company assumed and modified a lease with the former owner of MTI to lease MTI's 125,000 square foot manufacturing facility in Ventura, California. The lease period is for an initial term of 5 years with an option to renew for an additional five years. At the time of the acquisition, approximately 70 MTI employees became employees of Veeco. The acquisition was accounted for under the purchase method of accounting. Results of operations prior to the acquisition are not material to the Consolidated Statements of Operations. The results of operations for MTI for the period from October 6, 2004 through December 31, 2004 are included within the ion beam and mechanical process equipment segment of the Company in the accompanying Consolidated Statement of Operations for the year ended December 31, 2004.

The purchase price was allocated to the net assets acquired, based upon their estimated fair values, as determined by an independent appraisal. The purchase price was allocated to intangible assets as follows: approximately \$4.5 million to goodwill, which is nonamortizable under SFAS No. 142; \$2.8 million to core technology, amortizable over ten years; \$1.2 million to customer related intangibles, amortizable over a period of between six months and ten years; \$1.5 million to trademarks and trade names assigned an indefinite life and \$0.02 million to non-compete agreements, amortizable over one year. The purchased in-process technology, which totaled \$0.6 million, includes the value of products in the development stage, which have not reached technological feasibility and for which there are no alternative future uses. Accordingly, this amount was expensed at the acquisition date. MTI's in-process technology value is comprised of programs related to a Stripe Height Grinder and a Grind/Slice system that were approximately 50%, and 75% complete, respectively, at the date of acquisition. The value assigned to purchased in-process technology was determined by using the income approach, which



involves estimating the discounted after-tax cash flows attributable to projects, based on the projects' stage of completion. The rate used to discount net cash flows to their present value was 24%.

In conjunction with the plan to consolidate the facilities of MTI and Advanced Imaging, Inc. ("Aii") (see Note 7), the Company recorded the costs associated with the MTI lease and costs to involuntarily terminate and relocate employees of MTI as liabilities assumed as of the consummation date of the acquisition and included approximately \$3.8 million in the allocation of the purchase price in accordance with EITF 95-3. This amount primarily consists of future lease payments related to the MTI facilities which will be consolidated with Aii in 2005.

*Nanodevices, Inc.*

On June 5, 2003, the Company acquired the atomic force microscope probe business of Nanodevices Inc. ("Nanodevices"), based in Santa Barbara, California, for cash of \$6.0 million, plus a potential future cash earn-out payment of up to \$3.0 million over a three-year period, based on a set percentage for revenues in excess of certain targets, and up to \$1.0 million based on certain production targets. Nanodevices supplies probes and other components of the nanometer scale in atomic force microscopy. The acquisition was accounted for using the purchase method of accounting. Results of operations prior to the acquisition are not material to the Consolidated Statements of Operations. The results of operations for Nanodevices for the period from June 6, 2003 through December 31, 2003 are included within the metrology operating segment of the Company in the accompanying Consolidated Statements of Operations for the year ended December 31, 2003.

The purchase price was allocated to the net assets acquired, based upon their estimated fair values, as determined by an independent appraisal. During 2004, \$1.0 million was paid to the former shareholders of Nanodevices related to the production target as mentioned above and approximately \$1.9 million was accrued as a contingent earn-out payment related to certain revenue targets and is payable in the first quarter of 2005. Both amounts were recorded as additional goodwill at December 31, 2004 in accordance with EITF 95-8.

*Emcore Corporation's TurboDisc business*

On November 3, 2003, the Company purchased certain assets and assumed certain liabilities of Emcore Corporation's ("Emcore") TurboDisc ("TurboDisc") Metal Organic Chemical Vapor Deposition ("MOCVD") business of Somerset, New Jersey. TurboDisc is a leader in MOCVD production systems used in the growth of III-V compounds for numerous compound semiconductor applications, including data and telecommunications modules, cellular telephones and solar cells. TurboDisc's GaNzilla production systems are the recognized leader in growing gallium nitride-based devices, most notably green, blue and white HB-LEDs used in backlighting wireless mobile devices, specialty illumination and automotive applications. Under the purchase agreement, Emcore received approximately \$61.5 million in cash, plus a potential future cash earn-out payment of up to \$20 million over a two-year period, based on a set percentage for revenues in excess of certain targets. During 2004, approximately \$13.1 million of a contingent earn-out payment was recorded as additional goodwill in accordance with EITF 95-8 and recorded in accrued expenses at December 31, 2004. The Company expects to pay this amount in the first half of 2005. The Company incurred transaction costs of



approximately \$2.2 million in connection with the acquisition. The purchase consideration is computed as follows (in thousands):

Cash Payment	\$	61,543
Transaction costs		2,157
Total purchase price	\$	63,700

The acquisition was accounted for using the purchase method of accounting. The results of operations for TurboDisc for the period from November 3, 2003 to December 31, 2003 are included in the accompanying Consolidated Statement of Operations for the year ended December 31, 2003 and are included in the epitaxial process equipment segment of the business. The purchase price was allocated to the net assets acquired, based upon their estimated fair values, as determined by an independent appraisal as follows (in thousands):

Accounts receivable	\$	8,855
Inventories		12,871
Other current assets		36
Property, plant and equipment		8,910
Goodwill		18,485
Intangible assets		19,200
In-process technology		500
Total assets		68,857
Accounts payable		2,498
Other current liabilities		2,659
Total liabilities		5,157
Total purchase price	\$	63,700

The purchase price was allocated to intangible assets as follows: approximately \$18.5 million to goodwill, which is nonamortizable under SFAS No. 142 and is not deductible for income tax purposes; \$12.6 million to core technology, amortizable over nine years; \$3.6 million to customer related intangibles, amortizable over a period of between six months and ten years; \$2.9 million to trademarks and trade names assigned an indefinite life and \$0.1 million to non-compete agreements, amortizable over four years. The purchased in-process technology, which totaled \$0.5 million, includes the value of products in the development stage, which have not reached technological feasibility and for which there are no alternative future uses. Accordingly, this amount was expensed at the acquisition date. TurboDisc's in-process technology value is comprised of programs related to D180 GaN Reactor, DeviceNet Control System and Bakeout Station Development systems that were approximately 65%, 67% and 75% complete, respectively, at the date of acquisition. The value assigned to purchased in-process technology was determined by using the income approach, which involves estimating the discounted after-tax cash flows attributable to projects, based on the projects' stage of completion. The rate used to discount net cash flows to their present value was 24%. As of December 31, 2004, the



D180 GaN Reactor and DeviceNet Control System programs were 100% complete, while the Bakeout Station Development program had been cancelled.

*Advanced Imaging, Inc*

On November 18, 2003, the Company purchased all of the outstanding capital stock of Aii of Camarillo, California. As a result of the acquisition, Aii became a subsidiary of the Company. Aii is a world leading commercial manufacturer of precision bar lapping equipment for advanced data storage thin film magnetic heads. Aii, founded in 1985, was a privately held company at the time of the acquisition. Under the purchase agreement, the stockholders of Aii received \$60.0 million in cash, plus a potential future cash earn-out payment of up to \$9 million over a three-year period based on a set percentage for revenues in excess of certain targets. In addition, the Company incurred transaction costs of approximately \$1.4 million in connection with the acquisition. The purchase consideration is computed as follows (in thousands):

Cash payment	\$	60,000
Transaction costs		1,425
Total purchase price	\$	61,425

The acquisition was accounted for using the purchase method of accounting. The results of operations for Aii for the period from November 18, 2003 to December 31, 2003 are included in the accompanying Consolidated Statement of Operations for the year ended December 31, 2003 and are included in the ion beam and mechanical process equipment segment of the business. The purchase price was allocated to the net assets acquired, based upon their estimated fair values, as determined by an independent appraisal as follows (in thousands):

Accounts receivable	\$	2,823
Inventories		3,865
Other current assets		136
Property, plant and equipment		7,883
Goodwill		21,859
Intangible assets		42,400
In-process technology		1,000
Other non-current assets		3,615
Total assets		83,581

Accounts payable		631
Other current liabilities		643
Deferred income taxes		19,132
Other non-current liabilities		1,750
Total liabilities		22,156
Total purchase price	\$	61,425



The purchase price was allocated to intangible assets as follows: approximately \$21.9 million to goodwill, which is nonamortizable under SFAS No. 142 and is not deductible for income tax purposes; \$35.8 million to core technology, amortizable over approximately thirteen years; \$0.9 million to non-compete agreements, amortizable over five years; \$2.2 million to customer related intangibles, amortizable over a period of between six months and five years and \$3.5 million to trademarks and trade names, assigned an indefinite life. The purchased in-process technology, which totaled \$1.0 million, includes the value of products in the development stage, which have not reached technological feasibility and for which there are no alternative future uses. Accordingly, this amount was expensed at the acquisition date. Aii's in-process technology value is comprised of the Superarm project, which is an add-on to a lapping tool, and the Dice Mount product, technology that is designed to further assist companies in the dicing process. The Superarm and Dice Mount projects were approximately 15% and 67% complete, respectively, at the date of acquisition.

The value assigned to purchased in-process technology was determined by using the income approach, which involves estimating the discounted after-tax cash flows attributable to projects, based on the projects' stage of completion. The rate used to discount net cash flows to their present value was 25%. As of December 31, 2004, both programs were 100% complete.

In connection with the acquisition, \$3.5 million of Aii's cash was transferred into an interest bearing escrow account in order to set aside funds to pay claims, if any, that may arise related to preacquisition activity. This amount is included in other non-current assets in the above purchase price allocation. Under the terms of the escrow agreement, which terminates in November 2006, the remaining balance in the escrow account upon termination will be disbursed to Veeco and the former Aii shareholders equally. In the above purchase price allocation, \$1.8 million is included in other non-current liabilities to reflect this obligation.

The following table represents the unaudited pro forma results of Veeco, TurboDisc, Aii and Nanodevices as if the acquisitions had been consummated as of January 1, 2002. The pro forma amount uses fiscal period results for TurboDisc and Aii, based on their year-ends of September 30, 2003 and 2002, and August 31, 2003 and 2002, respectively.

	Year Ended December 31,	
	2003	2002
(In thousands, except per share amounts)		
Revenue	\$ 358,240	\$ 376,898
Loss before discontinued operations	(2,838)	(134,483)
Net loss	(2,838)	(134,829)
Loss per common share before discontinued operations	\$ (0.10)	\$ (4.62)
Net loss per common share	\$ (0.10)	\$ (4.63)
Diluted loss per common share before discontinued operations	\$ (0.10)	\$ (4.62)
Diluted net loss per common share	\$ (0.10)	\$ (4.63)

The results of operations for the TurboDisc business for 2002 include charges of \$4.0 million related to non-cash impairment charges from certain manufacturing assets that were to be disposed of



and \$1.1 million in connection with restructuring charges, including severance and fringe benefit costs related to Emcore Corporation employee terminations. The pro forma results of operations for the year ended December 31, 2002 include a \$0.5 million charge and a \$1.0 million charge, respectively, related to the write-off of purchased in-process technology for TurboDisc and Aii, respectively.

### 3. Balance Sheet Information (in thousands)

	December 31,	
	2004	2003
Inventories:		
Raw materials	\$ 52,301	\$ 49,734
Work in process	35,004	31,887
Finished goods	23,338	16,001
	<u>\$ 110,643</u>	<u>\$ 97,622</u>

	December 31,		Estimated Useful Lives
	2004	2003	
Property, plant and equipment:			
Land	\$ 9,274	\$ 9,274	
Buildings and improvements	40,028	38,459	10-40 years
Machinery and equipment	86,204	80,657	3-10 years
Leasehold improvements	5,572	6,856	3-7 years
	<u>141,078</u>	<u>135,246</u>	
Less accumulated depreciation and amortization	<u>67,565</u>	<u>62,504</u>	
	<u>\$ 73,513</u>	<u>\$ 72,742</u>	

	December 31,	
	2004	2003
Accrued expenses:		
Payroll and related benefits	\$ 16,849	\$ 12,371
Sales, use and other taxes	2,749	2,390
Customer deposits and advanced billings	6,910	5,297
Installation	498	495
Warranty	6,771	3,903
Acquisition-related earn-out payments (see Note 2)	15,056	—
Other	14,605	7,160
	<u>\$ 63,438</u>	<u>\$ 31,616</u>



*Accrued Warranty*

The Company estimates the costs that may be incurred under the warranty it provides and records a liability in the amount of such costs at the time the related revenue is recognized. Factors that affect the Company's warranty liability includes product failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. The Company periodically assesses the adequacy of its recorded warranty liability and adjusts the amount as necessary. Changes in the Company's warranty liability during the period are as follows (in thousands):

	2004	2003
Balance as of beginning of year	\$ 3,903	\$ 3,971
Warranties issued during the period	7,589	1,772
Settlements made during the period	(4,721)	(1,840)
Balance as of end of year	\$ 6,771	\$ 3,903

*Investments*

Management determines the appropriate classification of securities at the time of purchase and re-evaluates such designation as of each balance sheet date.

In connection with the convertible subordinated notes offering in December 2001 and the exercise of the over-allotment option in January 2002 (see Note 4), the Company purchased approximately \$25.9 million of U.S. government securities, which were pledged to the trustee under the indenture, as security for the exclusive benefit of the holders of the notes. These securities represented restricted investments and were sufficient to provide for the payment in full of the first six scheduled interest payments due on the notes, of which six payments of \$4.5 million each were made. These investments were classified as held to maturity and had a balance of \$8.9 million as of December 31, 2003. The amounts of these investments were carried at amortized cost and are included in long-term investments in the accompanying Consolidated Balance Sheet at December 31, 2003. There was no balance remaining at December 31, 2004.

**4. Debt***Credit Facility*

On March 15, 2005, the Company entered into a revolving credit facility which provides for borrowings of up to \$50.0 million (the "Facility"). The Facility's annual interest rate is a floating rate equal to the prime rate of the agent bank plus 1/4% and is adjustable to a minimum rate equal to the prime rate in the event the Company's ratio of debt to cash flow is below a defined amount. A LIBOR based interest rate option is also provided. The Facility has a term of three years and borrowings under the Facility may be used for general corporate purposes, including working capital and acquisitions. The Facility contains certain restrictive covenants, which among other requirements, impose limitations with respect to the incurrence of indebtedness, the payment of dividends, long-term leases, investments, mergers, acquisitions, consolidations and sales of assets. The Company will be required to satisfy certain financial tests under the Facility and substantially all of the assets of the Company and its material domestic subsidiaries, other than real estate, have been pledged to secure the Company's obligations under the Facility. As of March 15, 2005, no borrowings were outstanding under the Facility.



On March 15, 2005, the Company terminated its previous \$100.0 million revolving credit facility, which had been established on April 19, 2001 (the "Old Facility"). As of December 31, 2004 and 2003 and for all periods during 2004 and 2003, no borrowings were outstanding under the Old Facility. As of December 31, 2004, the Company was contingently liable for a letter of credit in the amount of \$0.3 million issued under the Old Facility. This letter of credit was terminated in connection with the termination of the Old Facility. As of December 31, 2003, the Company did not have any letters of credit for which it was contingently liable under the Old Facility.

The Company also had an unsecured letter of credit outstanding at December 31, 2004 for \$1.9 million.

#### *Long-term Debt*

Long-term debt is summarized as follows (in thousands):

	December 31,	
	2004	2003
Convertible subordinated debt	\$ 220,000	\$ 220,000
Mortgage notes payable	9,800	10,133
Other	135	135
	229,935	230,268
Less current portion	354	333
	\$ 229,581	\$ 229,935

#### *Convertible Subordinated Debt*

On December 21, 2001, the Company issued \$200.0 million of unsecured 4.125% convertible subordinated notes, and on January 3, 2002, the Company issued an additional \$20.0 million of unsecured convertible subordinated notes pursuant to the exercise of an over-allotment option. The fair market value of the \$220.0 million of convertible subordinated notes at December 31, 2004 and 2003 was approximately \$215.6 million and \$226.6 million, respectively, based on the trading price on the open market on such dates. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share. The Company pays interest on these notes on June 21 and December 21 of each year. Interest payments commenced on June 21, 2002 (see Note 3). The notes will mature on December 21, 2008. After December 20, 2004 the notes may be redeemed at the option of the Company at the redemption prices set forth in the indenture governing the notes.

#### *Mortgage Notes Payable*

Long-term debt at December 31, 2004 also consists of two mortgage notes payable, secured by certain land and buildings with carrying amounts aggregating approximately \$23.8 million at December 31, 2004. One mortgage note payable (\$5.9 million at December 31, 2004 and \$6.1 million at December 31, 2003) bears interest at an annual rate of 4.75%. The fair market value of this note at December 31, 2004 and 2003 was approximately \$5.8 million and \$6.9 million, respectively. This note is



being amortized over a period of 25 years with the final payment due on December 1, 2007. The second mortgage note payable (\$3.9 million at December 31, 2004 and \$4.1 million at December 31, 2003) bears interest at an annual rate of 7.91%, with the final payment due on January 1, 2020. The fair market value of this note at December 31, 2004 and 2003 was approximately \$4.7 million and \$5.4 million, respectively.

Long-term debt matures as follows (in thousands):

2005	\$	354
2006		376
2007		5,598
2008		220,316
2009		196
Thereafter		3,095
		<hr/>
		229,935
Less current portion		354
		<hr/>
	\$	229,581
		<hr/>

## 5. Stock Compensation Plans and Shareholders' Equity

### *Fixed Option Plans*

The Company has four fixed stock option plans. The Veeco Instruments Inc. 2000 Stock Incentive Plan, formerly known as the 2000 Stock Option Plan (the "2000 Plan") was approved by the Board of Directors and shareholders in May 2000. The 2000 Plan, as amended, provides for the grant to officers and key employees of up to 7,030,000 options (832,683 options are available for future grants as of December 31, 2004) to purchase shares of common stock of the Company. Stock options granted pursuant to the 2000 Plan become exercisable over a three-year period following the grant date and expire after seven years. In addition, the 2000 Plan provides for automatic annual grants of stock options to each member of the Board of Directors of the Company who is not an employee of the Company. Such options are exercisable immediately and expire after seven years. Up to 200,000 of the awards authorized under the 2000 Plan may be issued in the form of restricted stock. The Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees (the "Non-Officer Plan") was approved by the Board of Directors in October 2000. The Non-Officer Plan provides for the grant to non-officer employees to purchase shares of common stock of the Company. Stock options granted pursuant to the Non-Officer Plan become exercisable over a three-year period following the grant date and expire after seven years. The Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan (the "1992 Plan") provides for the grant to officers and key employees of options to purchase shares of common stock of the Company. Stock options granted pursuant to the 1992 Stock Option Plan become exercisable over a three-year period following the grant date and expire after ten years. The Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors, as amended, (the "Directors' Option Plan"), provides for automatic annual grants of stock options to each member of the Board of Directors of the Company who is not an employee of the Company. Such options are exercisable immediately and expire after ten years. The Non-Officer Plan, the 1992 Plan and the



Directors' Option Plan have been replaced by the 2000 Plan and thus there are no options available for future grant as of December 31, 2004 under these plans.

In addition to the four fixed plans, the Company assumed certain stock option plans and agreements in connection with the merger with Applied Epi. These stock option plans do not have options available for future grants and expire after ten years from the date of grant. Options granted under two of the plans vest over three years and options granted under one of the plans provides for immediate vesting. As of December 31, 2004, there are 251,158 options outstanding under the various Applied Epi plans. In addition, Veeco assumed certain warrants related to Applied Epi, which were in effect prior to the merger with Veeco. These warrants are fully vested, have no expiration date and have an exercise price of \$29.35 per share. At December 31, 2004, there are 211,603 warrants outstanding. In May 2000, the Company assumed certain stock option plans and agreements related to CVC, Inc. and Commonwealth Scientific Corporation, a subsidiary of CVC, Inc., which plans and agreements were in effect prior to the merger with Veeco. These plans do not have options available for future grants, the options granted thereunder generally vest over a three-to-five year period and expire five to ten years from the date of grant. As of December 31, 2004, there are 10,727 options outstanding under the various CVC, Inc. and Commonwealth Scientific Corporation plans.

The fair values of the options issued under the plans at the date of grant were estimated with the following weighted-average assumptions for 2004, 2003 and 2002: risk-free interest rate of 3.3%, 2.5% and 3.7%, respectively, no dividend yield, volatility factor of the expected market price of the Company's common stock of 66%, 74% and 78%, respectively, and a weighted-average expected life of the options of four years.

A summary of the Company's stock option plans as of and for the years ended December 31, 2002, 2003 and 2004, is presented below:

	2002		2003		2004	
	Shares (000)	Weighted- Average Exercise Price	Shares (000)	Weighted- Average Exercise Price	Shares (000)	Weighted- Average Exercise Price
Outstanding at beginning of year	4,867	\$ 33.85	5,813	\$ 30.83	6,481	\$ 28.25
Granted	1,658	22.03	1,348	17.06	2,214	21.89
Exercised	(137)	7.21	(149)	10.17	(248)	16.81
Forfeited (including cancelled options)	(575)	36.64	(531)	33.07	(669)	34.93
Outstanding at end of year	5,813	\$ 30.83	6,481	\$ 28.25	7,778	\$ 26.23
Options exercisable at year-end	2,952	\$ 32.85	4,026	\$ 32.42	4,688	\$ 29.83
Weighted-average fair value of options granted during the year		\$ 13.14		\$ 9.50		\$ 11.58



The following table summarizes information about fixed stock options outstanding at December 31, 2004:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding at December 31, 2004 (000's)	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise price	Number Outstanding at December 31, 2004 (000's)	Weighted- Average Exercise Price
\$ 0.27	132	6.0	\$ 0.27	132	\$ 0.27
8.59-12.11	25	3.1	10.50	20	10.38
13.10-19.54	1,032	5.1	15.61	411	15.55
19.91-29.82	4,383	5.2	23.22	1,926	24.72
30.00-43.75	2,002	2.9	37.62	1,995	37.64
46.50-67.45	202	4.2	51.27	202	51.26
70.93-72.00	2	5.4	71.51	2	71.51
	7,778	4.6	\$ 26.23	4,688	\$ 29.83

On December 18, 2003, the Company offered employees holding options as of that date with an exercise price of at least \$40.00 per share a one-time opportunity to exchange certain outstanding options for a lesser number of new options to be granted at least six months and one day from the cancellation of the surrendered options. In January 2004, the Company accepted all 142,335 options presented for exchange and canceled all such options. In accordance with the terms of the offer, employees received one new option for each 2.5 options exchanged, or a total of 55,534 new options on July 21, 2004. The exercise price of the new options was \$21.93, which was equal to the market price of the Company's common stock on the day of grant. Vesting terms for the new options is the same as the tendered options.

#### *Employee Stock Purchase Plan*

Under the Veeco Instruments Inc. Amended and Restated Employee Stock Purchase Plan (the "ESP Plan"), the Company is authorized to issue up to 2,000,000 shares of common stock to its full-time domestic employees, nearly all of whom are eligible to participate. Under the terms of the ESP Plan, employees can choose to have up to 10% of their annual base earnings withheld to purchase the Company's common stock. The purchase price of the stock is determined by the Compensation Committee of the Company's Board of Directors but shall not be less than 85% of the lower of its beginning-of-offering period or end-of-offering period market price. Under the ESP Plan, the Company issued 85,956 shares, 143,605 shares and 78,017 shares to employees under the ESP Plan in 2004, 2003 and 2002, respectively. The fair value of the employees' purchase rights was estimated using the following assumptions for 2004, 2003 and 2002, respectively: no dividend yield for all years; an expected life of one year for all years; expected volatility of 47%, 49% and 74%; and risk-free interest rates of 1.3%, 1.4% and 2.2%.

The weighted-average fair value of those purchase rights granted in 2004, 2003 and 2002 was \$8.89, \$3.86 and \$15.09, respectively.



*Shares Reserved for Future Issuance*

As of December 31, 2004, the Company has reserved the following shares for future issuance related to:

Issuance upon exercise of stock options	8,610,887
Issuance upon conversion of subordinated debt	5,712,802
Issuance upon exercise of warrants	211,603
Issuance of shares pursuant to the ESP Plan	1,520,577
<b>Total shares reserved</b>	<b>16,055,869</b>

*Preferred Stock*

The Board of Directors has authority under the Company's Certificate of Incorporation to issue shares of preferred stock with voting and economic rights to be determined by the Board or Directors.

**6. Income Taxes**

For financial reporting purposes, (loss) income before income taxes consists of (in thousands):

	Year ended December 31,		
	2004	2003	2002
Domestic	\$ (27,398)	\$ (30,190)	\$ (155,766)
Foreign	7,370	13,054	11,869
	<b>\$ (20,028)</b>	<b>\$ (17,136)</b>	<b>\$ (143,897)</b>

Significant components of the provision (benefit) for income taxes from continuing operations are presented below (in thousands):

	Year ended December 31,		
	2004	2003	2002
<b>Current:</b>			
Federal	\$ —	\$ (2,241)	\$ (1,283)
Foreign	2,696	4,116	2,543
State	98	101	67
	<b>2,794</b>	<b>1,976</b>	<b>1,327</b>
<b>Deferred:</b>			
Federal	39,732	(7,197)	(21,046)
Foreign	(831)	(865)	2,551
State	832	(1,303)	(3,345)
	<b>39,733</b>	<b>(9,365)</b>	<b>(21,840)</b>
	<b>\$ 42,527</b>	<b>\$ (7,389)</b>	<b>\$ (20,513)</b>



The following is a reconciliation of the income tax expense (benefit) from continuing operations computed using the Federal statutory rate to the Company's actual income tax expense from continuing operations (in thousands):

	Year ended December 31,		
	2004	2003	2002
Tax benefit at U.S. statutory rates	\$ (7,010)	\$ (5,998)	\$ (50,363)
State income tax benefit (net of federal benefit)	(2,052)	(1,237)	(3,301)
Goodwill impairment	—	—	33,038
Nondeductible expenses	272	221	210
In-process purchased technology	—	350	—
Research and development tax credit	(1,766)	(4,592)	(1,211)
Benefit of extra territorial income exclusion	(1,015)	(158)	(473)
Net change in valuation allowance	53,963	4,599	685
Foreign tax rate differential	(212)	(513)	2,039
Other	347	(61)	(1,137)
	<u>\$ 42,527</u>	<u>\$ (7,389)</u>	<u>\$ (20,513)</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Significant components of the Company's deferred tax assets and liabilities are as follows (in thousands):

	December 31,	
	2004	2003
Deferred tax assets:		
Inventory valuation	\$ 15,604	\$ 10,682
Domestic net operating loss carryforwards	51,047	43,505
Tax credit carryforwards	12,050	13,108
Foreign net operating loss carryforwards	767	907
Warranty and installation	2,372	1,689
Other accruals	6,716	8,639
Other	5,106	5,831
Total deferred tax assets	<u>93,662</u>	<u>84,361</u>
Valuation allowance	<u>(62,812)</u>	<u>(7,703)</u>
Net deferred tax assets	<u>30,850</u>	<u>76,658</u>
Deferred tax liabilities:		
Tax over book depreciation	1,981	2,664
Purchased intangible assets	24,568	29,751
DISC termination	1,205	1,406
Other	—	8
Total deferred tax liabilities	<u>27,754</u>	<u>33,829</u>
Net deferred taxes	<u>\$ 3,096</u>	<u>\$ 42,829</u>



U.S. income taxes have not been provided for approximately \$11.6 million of cumulative undistributed earnings of several non-U.S. subsidiaries. The Company intends to reinvest these earnings indefinitely in operations outside of the U.S. If these earnings were repatriated, additional foreign withholding taxes of approximately \$0.3 million would be payable. No additional U.S. tax would be due based on available net operating loss and tax credit carryforwards.

The Company has domestic net operating loss carryforwards of approximately \$124.5 million, which expire at various times between 2020 and 2024. The Company also has credit carryforwards of approximately \$12.0 million, consisting primarily of research and development credits, which expire at various times between 2017 and 2024, and foreign tax credits, which expire between 2012 and 2014.

For the year ended December 31, 2004, the Company recorded a charge of approximately \$54.0 million to establish a valuation allowance against the balance of its domestic net deferred tax assets, which consist of net operating loss and tax credit carryforwards, as well as temporary deductible differences. The valuation allowance was calculated in accordance with the provisions of SFAS No. 109, "Accounting for Income Taxes," which places primary importance on the Company's historical results of operations. Although the Company's results in prior years were significantly affected by restructuring and other charges, the Company's historical losses and losses incurred in the current fiscal year represented negative evidence sufficient to require a full valuation allowance under the provisions of SFAS No. 109. If the Company is able to realize part or all of the deferred tax assets in future periods, it will reduce its provision for income taxes with a release of the valuation allowance in an amount that corresponds with the income tax liability generated. The Company's remaining net deferred tax asset of approximately \$3.1 million as of December 31, 2004 relates to its foreign operations, which historically have been profitable. The valuation allowance in 2004 also included a \$1.1 million increase due to current year stock option tax benefits which were reserved. The valuation allowance increased by approximately \$4.6 million in 2003 principally because the Company determined that the benefit of certain foreign tax credits carryforwards may not be realized.

It is the Company's policy to establish accruals for taxes that may become payable in future years as a result of examinations by tax authorities. The Company establishes the accruals based upon management's assessment of probable contingencies. At December 31, 2004, the Company believes it has appropriately accrued \$1.2 million for probable contingencies. To the extent the Company was to prevail in matters for which accruals have been established or be required to pay amounts in excess of accruals, the Company's effective tax rate in a given financial statement period could be affected.

## **7. Commitments and Contingencies and Other Matters**

In response to the weak, industry-wide capital equipment spending conditions in the third quarter of 2004, particularly in the HB-LED/wireless and data storage markets, Veeco developed an expense reduction plan and restructured its business and operations in order to improve profitability in 2005. These actions were completed during the fourth quarter of 2004. In addition, as a direct result of the significant decline in the business environment and market conditions in 2002, the Company also recorded restructuring charges in 2003 and 2002. The actions giving rise to the restructuring charges described below were implemented in order for Veeco to remain competitive and such actions are expected to benefit Veeco by reducing future operating costs.



In conjunction with the plan announced by the Company in October 2004 to reduce employment levels by 10% in 2005 and in connection with the MTI acquisition the Company recorded merger, restructuring and other expenses of approximately \$3.6 million in the fourth quarter of 2004. The \$3.6 million charge consisted of \$2.8 million of personnel severance costs, and \$0.8 million accrual for costs related to the internal investigation of improper accounting transactions at its TurboDisc business unit. The Company also recorded \$0.8 million of asset impairment charges in the ion beam and mechanical process equipment segment related to the consolidation of the Aii and MTI business.

In conjunction with the acquisition of MTI in October 2004, Veeco implemented a plan to rationalize a certain product line of Aii, as well as consolidate manufacturing facilities of Aii and MTI. Even though many of the products of MTI are complimentary to Aii's products in terms of overall device thin film head control, there is some overlap within a product line, as well as excess capacity at both the Aii and MTI facilities. As a result, the Company recorded an inventory write-down of approximately \$0.5 million (included in cost of sales). In addition, as a result of the acquisition of MTI and the resulting plan of consolidation of the two facilities, certain long lived assets of Aii were classified as held for sale as of December 31, 2004. In accordance with SFAS No. 144, these long lived assets are measured at the lower of their carrying amount or fair value less cost to sell. Accordingly, an impairment charge of \$0.8 million was recorded by the Company. Fair value was determined by the Company based upon the actual sale proceeds, which were received in February 2005. Approximately \$2.2 million of fixed assets held for sale are included in prepaid expenses and other current assets in the accompanying Consolidated Balance Sheet at December 31, 2004.

The \$2.8 million charge for personnel costs includes severance related costs for approximately 107 employees, which included management, administration and manufacturing employees located at the Company's Plainview, New York and Camarillo, California ion beam and mechanical process equipment operations, the Somerset, New Jersey and St. Paul, Minnesota epitaxial process equipment operations, the Santa Barbara, California and Tucson, Arizona metrology facilities, the sales and service offices located in France, England and Singapore, and the corporate offices in Woodbury, New York. As of December 31, 2004, approximately \$0.7 million has been paid and approximately \$2.1 million remains accrued. The remainder is expected to be paid by the fourth quarter of 2005.

The \$0.8 million charge for costs related to the internal investigation of improper accounting transactions at its TurboDisc business unit (see Note 10) include accounting, legal and other auditing fees performed by external consultants who assisted with the investigation. As of December 31, 2004, the entire amount remained accrued, and will be paid by the second quarter of 2005.

A reconciliation of the liability for the restructuring and other charges during 2004 for severance and investigation costs is as follows (in millions):

	<b>Ion Beam and Mechanical Process Equipment</b>	<b>Epitaxial Process Equipment</b>	<b>Metrology</b>	<b>Unallocated Corporate</b>	<b>Total</b>
Charged to accrual	\$ 1.0	\$ 0.4	\$ 0.4	\$ 1.8	\$ 3.6
Cash payments during 2004	0.3	—	0.1	0.3	0.7
Balance as of December 31, 2004	\$ 0.7	\$ 0.4	\$ 0.3	\$ 1.5	\$ 2.9



*2003 Merger and Restructuring Charges*

During the year ended December 31, 2003, the Company incurred a restructuring charge of approximately \$4.8 million related to the reduction in work force announced in the fourth quarter of 2002, as a result of the decline in the markets in which the Company operates. This charge included severance related costs for approximately 180 employees, which included management, administration and manufacturing employees located at the Company's Fort Collins, Colorado, and Plainview and Rochester, New York ion beam and mechanical process equipment operations, the San Diego, Sunnyvale and Santa Barbara, California and Tucson, Arizona metrology facilities, the sales and service offices located in Munich, Germany, Singapore, and the corporate offices in Woodbury, New York. The charge also included costs of vacating facilities in Sunnyvale, California and Munich, Germany, and relocating the office in Japan. As of December 31, 2004, approximately \$4.3 million has been paid and approximately \$0.5 million remains accrued. The remainder is expected to be paid by the third quarter of 2005.

The Company also incurred \$0.6 million in merger and acquisition related expenses, which were paid during the fourth quarter of 2003.

A reconciliation of the liability for the restructuring charge during 2003 for severance and relocation costs is as follows (in millions):

	<b>Ion Beam and Mechanical Process Equipment</b>	<b>Epitaxial Process Equipment</b>	<b>Metrology</b>	<b>Unallocated Corporate</b>	<b>Total</b>
Charged to accrual	\$ 2.3	\$ —	\$ 2.1	\$ 0.4	\$ 4.8
Add-back from 2002 accrual	0.3	—	—	—	0.3
Total 2003 accrual	2.6	—	2.1	0.4	5.1
Cash payments during 2003	1.6	—	1.6	0.1	3.3
Cash payments during 2004	0.6	—	0.4	0.3	1.3
Balance as of December 31, 2004	\$ 0.4	\$ —	\$ 0.1	\$ 0.0	\$ 0.5

*2002 Merger and Restructuring Charges*

The Company recorded merger and restructuring charges of approximately \$126.0 million during the year ended December 31, 2002. The \$126.0 million charge consisted of a \$15.0 million inventory write-down (included in cost of sales) in the ion beam and mechanical process equipment segment, due to the rationalization and discontinuance of certain product lines, \$4.6 million of personnel and business relocation costs, \$6.4 million of merger-related expenses, \$0.3 million for a prepayment penalty on the early extinguishment of debt and \$99.7 million of asset impairment charges, primarily in the epitaxial process equipment and ion beam and mechanical process equipment segments. The \$99.7 million of asset impairment charges included a \$94.4 million write-down of goodwill (see Note 1), a \$3.5 million impairment of two buildings and a \$1.8 million impairment of other fixed assets.

In light of economic conditions, as well as the significant decline in ion beam and mechanical process equipment sales, the Company implemented a plan to rationalize certain product lines, which required discontinuance or modification of several products. As a result of the significant reduction in



sales volume and the rationalization of product lines, excess plant capacity existed. Part of the plan to reduce future operating costs consisted of consolidation or elimination of certain facilities resulting in the reduction of excess capacity. The plan included selling ion beam and mechanical process equipment manufacturing facilities in Fort Collins, Colorado and Rochester, New York. The manufacturing activities at both of these sites have been transferred to the Company's Plainview, New York facility. As a result of this reorganization the Company recorded an inventory write-down of approximately \$15.0 million.

In connection with these actions, certain products sold to the data storage industry were discontinued. These products included certain physical vapor deposition equipment. A portion of this product line's inventory is not useable and thus was written-off by the Company. The \$15.0 million charge also included the discontinuance or modification of certain telecommunications product lines, due to the continued decline in the telecommunications industry. This industry has seen a significant deterioration due to excess fiber optic capacity created by telephonic carriers as well as weakened economic conditions, which resulted in a significant decrease in capital spending during 2002.

The \$4.6 million charge for personnel and business relocation costs included severance costs of approximately \$3.6 million and business relocation costs of approximately \$1.0 million. The severance charges related to a workforce reduction of approximately 250 employees, located in all operations of the Company. The majority of the job classifications affected were in management, manufacturing, production, purchasing, engineering, service, sales and marketing and were concentrated in the ion beam and mechanical process equipment segment. This charge was offset in part by approximately \$0.8 million of income related to the settlement of a post-retirement benefit plan of the ion beam and mechanical process equipment segment. Business relocation costs of \$1.0 million included costs related to rental payments and/or lease termination fees on lease agreements relating to locations vacated by the Company. In addition, the business relocation costs included operating costs of the Rochester facility that had ceased manufacturing operations as of December 31, 2002. Operating costs continued to be incurred until the building was sold. As of December 31, 2004, the entire accrual for personnel and business relocation costs has been expended.

On July 11, 2002, the Company entered into a merger agreement with FEI Company ("FEI") headquartered in Hillsboro, Oregon. On January 8, 2003, the agreement was terminated. Veeco incurred approximately \$6.4 million in expenses related to the proposed merger with FEI. Merger-related costs were initially accounted for as an asset, and the Company intended to allocate these direct costs to the purchase price of the acquisition. However, due to the termination of the merger agreement, these costs were written off during the fourth quarter of 2002. These costs included legal, accounting, tax, investment banking and regulatory fees and printing costs. As of December 31, 2003, the \$6.4 million accrual has been paid. In 2003, the Company incurred an additional \$0.3 million in expenses related to the proposed merger with FEI. These expenses are included in the 2003 restructuring charge and were paid as of December 31, 2003.



In conjunction with the restructuring in the ion beam and mechanical process equipment segment and the closure of two manufacturing facilities, the Company had classified the two facilities as held for sale as of December 31, 2003 and 2002. In accordance with SFAS No. 144, the value of these facilities is measured at the lower of their carrying amount or fair value less cost to sell. Accordingly, an impairment charge of \$3.5 million was recorded during the fourth quarter of 2002 by the Company. Fair value was determined by the Company based upon recent market data. Land, buildings and other fixed assets held for sale of approximately \$5.5 million are included in prepaid expenses and other current assets in the accompanying Consolidated Balance Sheet at December 31, 2003. The sale of the Fort Collins, Colorado facility occurred in the second quarter of 2004 and the sale of the Rochester, New York facility occurred in the fourth quarter of 2004. Certain machinery and equipment and furniture and fixtures with a net book value of \$1.8 million, the majority of which is a result of the closing of the Rochester facility, were deemed to have no future value and, thus, the Company wrote off those assets and has included this charge in asset impairment in the accompanying Consolidated Statement of Operations for the year ended December 31, 2002.

#### *Minimum Lease Commitments*

Minimum lease commitments as of December 31, 2004 for property and equipment under operating lease agreements (exclusive of renewal options) are payable as follows (in thousands):

2005	\$	5,784
2006		4,636
2007		3,972
2008		3,544
2009		3,086
Thereafter		5,001
	\$	<u>26,023</u>

Rent charged to operations amounted to \$4.9 million, \$3.6 million and \$3.9 million in 2004, 2003 and 2002, respectively. In addition, the Company is obligated under the leases for certain other expenses, including real estate taxes and insurance.

#### *Royalties*

The Company has arrangements with a number of third parties to use patents in accordance with license agreements. Royalties and license fees expensed under these agreements approximated \$1.3 million, \$1.1 million and \$2.2 million in 2004, 2003 and 2002, respectively, and is recorded in selling, general and administrative expenses in the Company's Consolidated Statement of Operations.

#### *Related Party Transaction*

The Company purchased inventory from a company which is owned partially by an individual who was also employed by the Company. This individual resigned from the Company effective February 10, 2003. Payments to this related company in 2003 (through February 10) and 2002 were approximately \$0.5 million and \$4.6 million, respectively.



The Company currently leases two facilities from the former principal shareholder of Aii, who is a former employee of the Company. The first facility is approximately 26,000 square feet, for which the Company pays an annual base rent of approximately \$255,000, and which expires on May 1, 2012. The second facility is approximately 48,000 square feet, for which the Company pays an annual base rent of approximately \$425,000, and which expires on June 30, 2007. Management believes that both leases are at fair market value rates.

#### *Environmental Remediation*

The Company may, under certain circumstances, be obligated to pay up to \$250,000 in connection with the implementation of a comprehensive plan of environmental remediation at its Plainview, New York facility. The Company has been indemnified for any liabilities it may incur in excess of \$250,000 with respect to any such remediation. No comprehensive plan has been required to date. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any remediation plan that may be proposed.

The Company is aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by the Company in Santa Barbara, California. The Company has been indemnified for any liabilities it may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any such liabilities.

The former owner of the land and building in which the Company's Santa Barbara, California metrology operations are located has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that is part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise.

#### *Litigation*

On September 17, 2003, the Company filed a lawsuit in the United States District Court for the Central District of California against Asylum Research Inc., a privately-held company founded by former Veeco employees. The lawsuit alleges that the manufacture, use and sale of Asylum's MFP-3D AFM constitutes willful infringement of five patents owned by the Company, as well as other claims. The Company is suing for unspecified monetary damages and a permanent injunction to stop infringement. Asylum has asserted that the patents the Company is suing on are invalid and unenforceable, and has filed a counterclaim for infringement of a patent licensed by Asylum, and payment of royalties it believes it is owed. Cross motions for summary judgment related to the issues of infringement and/or validity of the patents in suit are pending. The Court has held hearings on the summary judgment motions and has referred many of the issues to a Special Master. The Company believes that Asylum's claims are without merit and intends to vigorously pursue its claims.

On February 11, 2005, the Company issued a press release announcing, among other things (a) the postponement of the release of its financial results for the fourth quarter and full year ended December 31, 2004 pending completion of an internal investigation of improper accounting transactions at its TurboDisc business unit and (b) Veeco's expectation that this investigation will lead to



adjustments requiring the restatement of the Company's financial statements previously issued for the quarterly periods and nine months ended September 30, 2004.

Following the February 11 announcement, a putative class action shareholder suit was filed in federal court in the Southern District of New York asserting claims for violation of federal securities laws on behalf of persons who acquired the Company's securities during the period beginning November 3, 2003 and ending February 10, 2005. In addition, five putative class action shareholder suits were filed in federal court in the Eastern District of New York on behalf of persons who acquired Veeco securities during the period beginning November 3, 2003 or April 26, 2004 and ending February 10, 2005. The lawsuits name Veeco, its Chairman and Chief Executive Officer, and its Executive Vice President and Chief Financial Officer as defendants, and seek unspecified damages. The lawsuits allege claims against all defendants for violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and claims against the individual defendants for violations of Section 20(b) of the Exchange Act. The Company believes these lawsuits are without merit and intends to defend vigorously against the claims.

On or about February 28, the Company received a letter on behalf of a shareholder demanding that the Company commence legal action against its directors and certain of its officers for breaches of fiduciary duties relating to the improper accounting transactions at the TurboDisc business unit. The letter states that, if the Board does not commence such an action within a reasonable period of time, the shareholder will commence a derivative action on the Company's behalf seeking damages allegedly sustained by the Company and the return of all bonuses, restricted stock, stock options and other incentive compensation.

The Company is involved in various other legal proceedings arising in the normal course of its business. The Company does not believe that the ultimate resolution of these matters will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

#### *Concentrations of Credit Risk*

The Company's business depends in large part upon the capital expenditures of data storage, HB-LED/wireless and semiconductor manufacturers, as well as research and industrial customers, which accounted for the following percentages of the Company's net sales:

	December 31,		
	2004	2003	2002
Data Storage	32 %	33 %	32 %
HB-LED/wireless	25 %	14 %	15 %
Semiconductor	14 %	14 %	13 %
Research and Industrial	29 %	39 %	40 %

Sales to Seagate Technology, Inc., accounted for approximately 10%, 11% and 13% of the Company's net sales during the years ended December 31, 2004, 2003 and 2002, respectively. Each of the Company's segments sell to this major customer. At December 31, 2004 and 2003, accounts



receivable due from Seagate represented approximately 6% and 13% of aggregate accounts receivable, respectively.

The Company manufactures and sells its products to companies in different geographic locations. In certain instances, the Company requires advanced deposits for a portion of the sales price in advance of shipment. However, the majority of system sales do not require such advance payments. The Company does, however, perform periodic credit evaluations of its customers' financial condition and, where appropriate, requires that letters of credit be provided on foreign sales. Receivables generally are due within 30-60 days, other than receivables generated from customers in Japan where payment terms range from 90-150 days. The Company's net accounts receivable are concentrated in the following geographic locations (in thousands):

	December 31,	
	2004	2003
United States	\$ 25,375	\$ 16,144
Europe	19,563	16,782
Japan	23,340	17,169
Asia Pacific	17,041	19,338
Other	595	457
	<u>\$ 85,914</u>	<u>\$ 69,890</u>

#### *Discontinued Operations*

In December 2001, the Company signed a letter of intent to sell the remainder of the industrial measurement business. In January 2000, the Company sold its leak detection business, which was part of this segment. Accordingly, the Company classified the industrial measurement business as a discontinued operation at December 31, 2001. In May 2002, the Company sold the remainder of its industrial measurement business. During the year ended December 31, 2002, the Company recorded an additional loss on the disposal of the discontinued operations of \$0.3 million, net of taxes of approximately \$0.2 million.

#### **8. Foreign Operations, Geographic Area and Product Segment Information**

Revenue and long-lived assets related to operations in the United States and other foreign countries as of and for the years ended December 31, 2004, 2003 and 2002 are as follows (in thousands):

	Net Sales to Unaffiliated Customers			Long-Lived Assets		
	2004	2003	2002	2004	2003	2002
United States	\$ 146,082	\$ 109,323	\$ 139,342	\$ 260,106	\$ 248,991	\$ 138,585
Foreign Countries	244,361	169,998	159,543	1,646	1,431	1,701
	<u>\$ 390,443</u>	<u>\$ 279,321</u>	<u>\$ 298,885</u>	<u>\$ 261,752</u>	<u>\$ 250,422</u>	<u>\$ 140,286</u>



Revenue related to the Company's operations in Japan for the years ended December 31, 2004, 2003 and 2002 are \$67.3 million, \$56.5 million and \$52.9 million, respectively. Revenue related to the Company's operations in Asia Pacific for the years ended December 31, 2004, 2003 and 2002 are \$108.6 million, \$66.5 million and \$55.6 million, respectively. Revenue related to the Company's operations in Europe for the years ended December 31, 2004, 2003 and 2002 are \$71.2 million, \$45.7 million, and \$46.9 million, respectively.

During the quarter ended September 30, 2004, the Company changed the structure of its internal organization in a manner which caused the composition of its reportable segments to change. The Company currently manages, reviews operating results and assesses performance, as well as allocates resources, based upon this reporting structure. The change implemented by the Company was to split out the former process equipment segment into two separate reportable segments. The first segment, called "ion beam and mechanical process equipment," combines the etch, deposition and dicing and slicing products sold mostly to data storage customers. This segment includes the production facilities in Plainview, New York, Ft. Collins, Colorado and Camarillo and Ventura, California. The second segment, called "epitaxial process equipment," includes the Molecular Beam Epitaxy and Metal Organic Chemical Vapor Deposition products primarily sold to high brightness light emitting diodes and wireless telecommunications customers.

This segment includes the production facilities in St. Paul, Minnesota, and Somerset, New Jersey. The metrology segment, which includes the production facilities in Santa Barbara, California and Tucson, Arizona remains unchanged. As such, the Company has restated the segment information for prior periods as if the composition of its reportable segments described above had existed in such prior periods.

The Company evaluates performance based on income or loss from operations before interest, income taxes and amortization (EBITA). The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Costs excluded from segment profit primarily consist of corporate expenses, including income taxes, as well as other unusual charges for purchased in-process technology, restructuring and asset impairment charges and merger-related costs. Corporate expenses are comprised primarily of general and administrative expenses.

The Company's reportable segments are business units that offer different products. The reportable segments are each managed separately because they manufacture and distribute distinct



products with different production processes. The following table sets forth the reportable product segments of the Company (in thousands):

	Net Sales			(Loss) income before interest, income taxes and amortization			Total Assets		
	2004	2003	2002	2004	2003	2002	2004	2003	2002
Ion Beam and Mechanical Process Equipment	\$ 134,009	\$ 95,882	\$ 116,218	\$ 3,328	\$ 1,594	\$ (18,880)	\$ 184,266	\$ 187,301	\$ 116,475
Epitaxial Process Equipment	93,597	34,289	30,519	(4,285)	1,120	1,277	144,021	120,831	67,022
Metrology	162,837	149,150	152,148	21,359	17,888	25,902	140,654	130,247	133,757
Unallocated corporate amount	—	—	—	(8,017)	(9,224)	(6,960)	107,972	158,085	288,133
Merger, restructuring and other	—	—	—	(3,562)	(5,403)	(11,248)	—	—	—
Inventory write-off	—	—	—	(500)	—	(15,000)	—	—	—
Asset impairment charges	—	—	—	(816)	—	(99,663)	—	—	—
Write-off of purchased in-process technology	—	—	—	(600)	(1,500)	—	—	—	—
<b>Total</b>	<b>\$ 390,443</b>	<b>\$ 279,321</b>	<b>\$ 298,885</b>	<b>\$ 6,907</b>	<b>\$ 4,475</b>	<b>\$ (124,572)</b>	<b>\$ 576,913</b>	<b>\$ 596,464</b>	<b>\$ 605,387</b>

The following table outlines the components of goodwill by business segment at December 31, 2004 and 2003 (in thousands):

	December 31,	
	2004	2003
Ion Beam and Mechanical Process Equipment	\$ 27,276	\$ 21,676
Epitaxial Process Equipment	39,091	25,944
Metrology	28,278	25,369
<b>Total</b>	<b>\$ 94,645</b>	<b>\$ 72,989</b>

Other Significant Items (in thousands):

	Year ended December 31,		
	2004	2003	2002
Depreciation and amortization expense:			
Ion Beam and Mechanical Process equipment	\$ 10,748	\$ 6,146	\$ 8,633
Epitaxial Process equipment	11,937	10,182	9,245
Metrology	6,075	6,327	6,761
Unallocated corporate	2,504	2,203	3,290
<b>Consolidated depreciation and amortization expense</b>	<b>\$ 31,264</b>	<b>\$ 24,858</b>	<b>\$ 27,929</b>
Expenditures for long-lived assets:			
Ion Beam and Mechanical Process equipment	\$ 4,789	\$ 2,320	\$ 4,688
Epitaxial Process equipment	3,704	2,160	477
Metrology	2,602	1,507	1,956
Unallocated corporate	4,381	2,090	1,523
<b>Consolidated expenditures for long-lived assets</b>	<b>\$ 15,476</b>	<b>\$ 8,077</b>	<b>\$ 8,644</b>



**9. Defined Contribution Benefit Plan**

The Company maintains a defined contribution plan under Section 401(k) of the Internal Revenue Code. Principally all of the Company's domestic full-time employees are eligible to participate in the plan. Under the plan, employees may contribute up to a maximum of 60% of their annual wages, up to a maximum of \$13,000 for employees under 50 years of age and \$16,000 for employees 50 years of age or older. Employees are immediately vested in their contributions. Company contributions to the plan in 2004, 2003 and 2002, were \$1.2 million, \$0.0 million and \$0.5 million, respectively. Generally, the plan calls for vesting of Company contributions over a five-year period.

**10. Subsequent Event (Unaudited)**

On February 11, 2005, Veeco announced the postponement of the release of audited results for the fourth quarter and year ended December 31, 2004, pending completion of an internal investigation of improper accounting transactions at its TurboDisc business unit. Veeco acquired the assets of TurboDisc in November 2003. The investigation focused principally on the value of inventory, accounts payable, accrued liabilities, and certain revenue items carried on the books of TurboDisc. The investigation was commenced after Veeco's corporate financial management and internal audit staff discovered improper accounting transactions in the course of a Veeco internal audit. The Audit Committee of the Company's Board of Directors supervised the accounting investigation and authorized Veeco's outside counsel, Kaye Scholer LLP, to hire Jefferson Wells International to perform forensics and accounting reconstruction work as part of the investigation. The investigation has been completed. Conclusions reached during the investigation included that the improper accounting entries were made by a single individual at the business unit whose employment had been terminated prior to the commencement of the investigation, and that there was no evidence found of embezzlement or diversion of corporate assets.

The adjustments included in the restatement are summarized in the table included in "Item 8: *Financial Statements and Supplementary Data—Quarterly Results of Operations*"

On March 16, 2005, Veeco reported that it had completed its internal investigation and would be restating the financial statements previously issued for the quarterly periods and nine months ended September 2004. The pre-tax decrease to earnings previously reported is \$2.8 million, \$4.3 million and \$3.1 million for the three month periods ended March 31, 2004, June 30, 2004 and September 30, 2004, respectively. In addition, as a result of revenue recognition adjustments, (decreases) increases to revenues previously reported will be \$(3.6) million, \$(3.6) million and \$5.0 million for the three month periods ended March 31, 2004, June 30, 2004 and September 30, 2004, respectively. These revenue adjustments, in the aggregate do not reduce total revenue recognized for 2004.



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COL. A	COL. B		COL. C		COL. D	COL. E
Description	Balance at Beginning of Period	Additions		Deductions	Balance at End of Period	
		Charged to Costs and Expenses	Charged to Other Accounts			
Deducted from asset accounts:						
Year ended December 31, 2004:						
Allowance for doubtful accounts	\$ 2,458	\$ 173	\$ —	\$ 211	\$ 2,420	
Valuation allowance on net deferred tax assets	7,703	53,963	1,146	—	62,812	
	\$ 10,161	\$ 54,136	\$ 1,146	\$ 211	\$ 65,232	
Deducted from asset accounts:						
Year ended December 31, 2003:						
Allowance for doubtful accounts	\$ 2,815	\$ 208	\$ 276	\$ 841	\$ 2,458	
Valuation allowance on net deferred tax assets	3,104	4,599	—	—	7,703	
	\$ 5,919	\$ 4,807	\$ 276	\$ 841	\$ 10,161	
Deducted from asset accounts:						
Year ended December 31, 2002:						
Allowance for doubtful accounts	\$ 3,350	\$ 1,020	\$ —	\$ 1,555	\$ 2,815	
Valuation allowance on net deferred tax assets	2,419	—	685	—	3,104	
	\$ 5,769	\$ 1,020	\$ 685	\$ 1,555	\$ 5,919	



## INDEX TO EXHIBITS

Unless otherwise indicated, each of the following exhibits has been previously filed with the Securities and Exchange Commission by the Company under File No. 0-16244.

Number	Exhibit	Incorporated by Reference to the Following Documents
3.1	Amended and Restated Certificate of Incorporation of the Company dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 1997, Exhibit 3.1
3.2	Amendment to Certificate of Incorporation of Veeco dated May 29, 1998.	Annual Report on Form 10-K for the year ended December 31, 2000, Exhibit 3.2
3.3	Amendment to Certificate of Incorporation of Veeco dated May 5, 2000.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 3.1
3.4	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of Veeco.	Quarterly Report on Form 10-Q for the Quarter Ended March 31, 2001, Exhibit 3.1
3.5	Third Amended and Restated Bylaws of the Company, effective October 26, 2000.	Registration Statement on Form S-8 (File No. 333-49476), filed November 7, 2000, Exhibit 4.3
4.1	Rights Agreement, dated as of March 13, 2001, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as Rights Agent, including the form of the Certificate of Designation, Preferences and Rights setting forth the terms of the Series A Junior Participating Preferred Stock, par value \$0.01 per share, as Exhibit A, the form of Rights Certificates as Exhibit B and the Summary of Rights to Purchase Preferred Stock as Exhibit C.	Registration Statement on Form 8-A dated March 15, 2001, Exhibit 1
4.2	Amendment to Rights Agreement, dated as of September 6, 2001, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as rights agent.	Current Report on Form 8-K, filed September 21, 2001, Exhibit 4.1
4.3	Amendment No 2 to Rights Agreement, dated as of July 11, 2002, between Veeco Instruments Inc. and American Stock Transfer and Trust Company, as rights agent.	Current Report on Form 8-K, filed July 12, 2002, Exhibit 4.1
4.4	Indenture between Veeco and State Street Bank and Trust Company, N.A., as trustee, dated December 21, 2001, relating to the 4 <sup>1</sup> / <sub>8</sub> % convertible subordinated notes due 2008.	Registration Statement on Form S-3 (File No. 333-84252), filed March 13, 2002, Exhibit 4.1



- 10.1 Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2001, Exhibit 10.1
- 10.2 Amendment and Waiver dated as of September 17, 2001 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.1
- 10.3 Consent and Second Amendment dated as of December 21, 2001 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.3
- 10.4 Third Amendment dated as of February 7, 2002 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.4
- 10.5 Fourth Amendment dated as of March 20, 2002 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, The Chase Manhattan Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2001, Exhibit 10.5
- 10.6 Fifth Amendment dated as of February 5, 2003 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2002, Exhibit 10.6
- 10.7 Sixth Amendment dated as of October 30, 2003 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Quarterly Report on Form 10-K for the Quarter Ended September 30, 2003, Exhibit 10.1
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- 10.8 Seventh Amendment dated as of February 5, 2004 to the Credit Agreement, dated April 19, 2001 among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent and the lenders named therein. Annual Report on Form 10-K for the Year Ended December 31, 2003, Exhibit 10.8
- 10.9 Eighth Amendment dated as of August 25, 2004, effective June 30, 2004, to the Credit Agreement dated as of April 19, 2001, as amended, among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent, and the lenders named therein. Current Report on Form 8-K, filed August 31, 2004, Exhibit 10.1
- 10.10 Ninth Amendment dated as of October 4, 2004, to the Credit Agreement dated as of April 19, 2001, as amended, among Veeco Instruments Inc., Fleet National Bank, as administrative agent, JPMorgan Chase Bank, as syndication agent, HSBC Bank USA, as documentation agent, and the lenders named therein. Filed herewith
- 10.11 Security Agreement dated as of March 20, 2002 among Veeco Instruments Inc., the subsidiaries of Veeco named therein and Fleet National Bank, as administrative agent. Quarterly Report on Form 10-Q for the Quarter Ended March 31, 2002, Exhibit 10.3
- 10.12 Loan Agreement dated as of December 15, 1999 between Applied Epi, Inc. and Jackson National Life Insurance Company. Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.2
- 10.13 Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002). Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2002, Exhibit 10.2
- 10.14 Promissory Note dated as of December 15, 1999 issued by Applied Epi, Inc. to Jackson National Life Insurance Company. Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 10.3
- 10.15 \* Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan. Registration Statement on Form S-1 (File No. 33-93958), Exhibit 10.20
- 10.16 \* Amendment dated May 15, 1997 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan. Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.1
- 10.17 \* Amendment dated July 25, 1997 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan. Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.2
- 10.18 \* Amendment dated May 29, 1998 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan. Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.1
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- 10.19  
\* Amendment dated May 14, 1999 to Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan. Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.2
- 10.20  
\* Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors. Registration Statement on Form S-1 (File No. 33-85184), Exhibit 10.17
- 10.21  
\* Amendment dated May 15, 1996 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors. Registration Statement on Form S-8 (File No. 333-08981) filed July 26, 1996, Exhibit 10.2
- 10.22  
\* Amendment dated May 15, 1997 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors. Registration Statement on Form S-8 (File No. 333-35009) filed September 5, 1997, Exhibit 10.3
- 10.23  
\* Amendment dated May 21, 1999 to Veeco Instruments Inc. Amended and Restated 1994 Stock Option Plan for Outside Directors. Registration Statement on Form S-8 (File No. 333-79469) filed May 27, 1999, Exhibit 10.3
- 10.24  
\* Veeco Instruments Inc. First Amended and Restated Employee Stock Purchase Plan, dated October 26, 2000. Annual Report on Form 10-K for the Year Ended December 31, 2000, Exhibit 10.18
- 10.25  
\* Amendment No. 1 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective January 1, 2003. Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2003, Exhibit 10.1
- 10.26  
\* Amendment No. 2 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective May 7, 2004. Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2004, Exhibit 10.1
- 10.27  
\* Amendment No. 3 to the Veeco Instruments Inc. First Amended and Restated Employees Stock Purchase Plan, effective January 1, 2005. Filed herewith
- 10.28  
\* Veeco Instruments Inc. 2000 Stock Incentive Plan (amending and restating the Veeco Instruments Inc. 2000 Stock Option Plan, as amended) effective May 7, 2004. Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2004, Exhibit 10.2
- 10.29  
\* Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees. Registration Statement on Form S-8 (File Number 333-49476) filed November 7, 2000, Exhibit 4.4
- 10.30  
\* Amendment No. 1 to the Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees, effective dated July 26, 2001. Registration Statement on Form S-8 (File Number 333-66574) filed August 2, 2001, Exhibit 4.2
- 10.31  
\* Applied Epi, Inc. 1993 Stock Option Plan. Registration Statement on Form S-8 (File Number 333-69554) filed on September 18, 2001, Exhibit 4.1
- 10.32  
\* Form of Applied Epi, Inc. Non-Qualified Restricted Stock Option Agreement. Registration Statement on Form S-8 (File Number 333-69554) filed on September 18, 2001, Exhibit 4.3
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10.33	Form of Warrant to Purchase Shares of Common Stock of Applied Epi, Inc. (assumed in connection with the Applied Epi merger and now exercisable for shares of common stock of Veeco Instruments Inc.)	Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2001, Exhibit 4.6
10.34	* Employment Agreement dated as of April 1, 2003 between Edward H. Braun and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.3
10.35	* Employment Agreement dated as of April 1, 2003 between Don R. Kania and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.4
10.36	* Employment Agreement dated as of April 1, 2003 between John F. Rein, Jr. and Veeco Instruments Inc.	Quarterly Report on Form 10-Q for the Quarter Ended June 30, 2000, Exhibit 10.5
10.37	* Letter Agreement dated January 21, 2004 between the Company and John P. Kiernan.	Annual Report on Form 10-K for the Year Ended December 31, 2003, Exhibit 10.38
10.38	* Letter Agreement dated July 7, 2004 supplementing letter agreement dated April 1, 2003, between the Company and John K. Bulman	Filed herewith
21.1	Subsidiaries of the Registrant.	Filed herewith
23.1	Consent of Ernst & Young LLP.	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith

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\*  
Indicates a management contract or compensatory plan or arrangement, as required by Item 15(a)(3) of Form 10-K.

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QuickLinks

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[PART II](#)

[Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.](#)

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[Report of Independent Registered Public Accounting Firm](#)

[Veeco Instruments Inc. and Subsidiaries Consolidated Balance Sheets \(Dollars in thousands\)](#)

[Veeco Instruments Inc. and Subsidiaries Consolidated Statements of Operations \(In thousands, except per share data\)](#)

[Veeco Instruments Inc. and Subsidiaries Consolidated Statements of Shareholders' Equity \(Dollars in thousands\)](#)

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**Veeco Instruments Inc.****Annual Report on Form 10-K for the Year Ended December 31, 2004**

**NINTH AMENDMENT**, dated as of October 4, 2004 (this "Amendment") to the Credit Agreement dated as of April 19, 2001, as amended September 17, 2001, December 21, 2001, February 7, 2002, March 20, 2002, February 5, 2003, October 30, 2003, February 5, 2004 and August 25, 2004 (as further amended, restated, supplemented or modified, the "Credit Agreement") by and among **VEECO INSTRUMENTS INC.**, a Delaware corporation (the "Company"), **FLEET NATIONAL BANK, a Bank of America Company**, a national banking association, as Administrative Agent and as a Lender, **JPMORGAN CHASE BANK** (formerly known as The Chase Manhattan Bank), a New York banking corporation, as Syndication Agent and as a Lender, **HSBC BANK USA**, a national banking association organized under the laws of the United States of America, as Documentation Agent and as a Lender, and the other Lenders party thereto.

**WHEREAS**, the Company has requested and the Administrative Agent and the Lenders have agreed, subject to the terms and conditions of this Amendment, to amend certain provisions of the Credit Agreement as hereinafter set forth..

**NOW, THEREFORE**, in consideration of the premises and of the mutual agreements herein contained, the parties hereto agree as follows:

1. **Amendment.** The definition of the term "Permitted Acquisition" contained in Section 1.01 of the Credit Agreement is hereby amended adding the following sentence at the end thereof:

"Notwithstanding anything to the contrary herein, (x) the acquisition by the Company or a Corporate Guarantor of all or substantially all of the assets of the Manufacturing Technology Inc. business of Bodee's Ranch, Inc. (the "MTI Acquisition") and (y) the acquisition by the Company or a Corporate Guarantor of a company, division or other Person described to, and approved by, the Lenders (the "Proposed Acquisition"; with the MTI Acquisition, each an "Acquisition") shall be deemed to be Permitted Acquisitions, provided that (a) with respect to the MTI Acquisition, (i) such Acquisition occurs on or before October 31, 2004 and (ii) the aggregate cash consideration paid by the Company does not exceed \$10,000,000, (b) with respect to the Proposed Acquisition, (i) such Acquisition occurs on or before December 31, 2004 and (ii) the aggregate cash consideration paid by the Company does not exceed \$9,000,000, and (c) with respect to the MTI

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Acquisition and the Proposed Acquisition, each such Acquisition satisfies the requirements of a Permitted Acquisition set forth above, other than after giving effect to the proposed Acquisition, the Permitted Acquisition Purchase Price paid in connection with all Permitted Acquisitions will be in excess of \$100,000,000."

2. **Conditions to Effectiveness.**

This Amendment shall become effective as of the date hereof, upon receipt by the Administrative Agent of (a) this Amendment, duly executed by the Company and the Guarantors, (b) an amendment fee of \$30,000 (with each Lender to receive one-sixth of such fee), and (c) the consent of each Lender to the Amendment described herein.

3. **Miscellaneous.**

The amendment herein is limited specifically to the matter set forth above and for the specific instance and purpose for which given and does not constitute directly or by implication an amendment or waiver of any other provisions of the Credit Agreement or a waiver of any Default or Event of Default.

Capitalized terms used herein and not otherwise defined herein shall have the same meanings as defined in the Credit Agreement.

Except as expressly amended hereby, the Credit Agreement shall remain in full force and effect in accordance with the original terms thereof. The Credit Agreement is ratified and confirmed in all respects by the Company.

The Company hereby represents and warrants that (a) after giving effect to this Amendment, the representations and warranties in the Credit Agreement and the other Facility Documents are true and correct in all material respects as of the date hereof with the same effect as though such representations and warranties have been made on and as of such date, unless such representation is as of a specific date, in which case, as of such date, and (b) after giving effect to this Amendment, no Default or Event of Default has occurred and is continuing.

**THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAWS.**

The Company represents and warrants that it has the corporate power and authority to enter into, perform and deliver this Amendment and any other documents, instruments, agreements or other writings to be delivered in connection herewith and that this Amendment



and all documents contemplated hereby or delivered in connection herewith have each been duly executed and delivered by the Company and the transactions contemplated herein have been duly authorized.

This Amendment may be executed in one or more counterparts, each of which shall constitute an original, but all of which when taken together shall constitute but one Amendment. This Amendment shall become effective when duly executed counterparts hereof which, when



taken together, bear the signatures of each of the parties hereto shall have been delivered to the Administrative Agent.

This Amendment shall constitute a Loan Document.

**IN WITNESS WHEREOF**, the Company and the Administrative Agent, as authorized on behalf of the Lenders, have caused this Amendment to be duly executed by their duly authorized officers, all as of the day and year first above written.

**VEECO INSTRUMENTS INC.**

By: /s/ John F. Rein, Jr.

Name: John F. Rein, Jr.

Title: Executive Vice President and  
Chief Financial Officer

**FLEET NATIONAL BANK, a Bank of America  
Company, as Administrative Agent**

By: /s/ Debra E. DelVecchio

Name: Debra E. DelVecchio

Title: Managing Director



**CONSENT**

The undersigned, not parties to the Credit Agreement but as Guarantors under their respective Guaranties executed in favor of the Lenders, each hereby (a) accept and agree to the terms of the foregoing Amendment; (b) acknowledge and confirm that all terms and provisions contained in their respective Guaranty are, and shall remain, in full force and effect in accordance with their respective terms; (c) reaffirm and ratify all of the representations and covenants contained in their respective Guaranty; and (d) represent, warrant and confirm the non-existence of any offsets, defenses and counterclaims to its obligations under its Guaranty.

**VEECO TUCSON INC.  
(formerly Wyko Corporation)**

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Vice President

**VEECO FT. COLLINS INC.  
(formerly Ion Tech, Inc.)**

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Vice President

**VEECO COMPOUND  
SEMICONDUCTOR  
INC. (formerly Veeco St. Paul Inc.)**

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Vice President

**VEECO METROLOGY, LLC**

By: Veeco Instruments Inc., its Sole Member

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Executive Vice President and  
Chief Financial Officer

**VEECO ROCHESTER INC.  
(formerly CVC Products, Inc.)**

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Vice President

**VEECO AII INC.  
(formerly Advanced Imaging, Inc.)**

By: /s/ John F. Rein, Jr.  
Name: John F. Rein, Jr.  
Title: Vice President



**Veeco Instruments Inc.**  
**Annual Report on Form 10-K for the Year Ended December 31, 2004**

**AMENDMENT NO. 3 TO  
VEECO INSTRUMENTS INC.  
FIRST AMENDED AND RESTATED  
EMPLOYEE STOCK PURCHASE PLAN**

Effective December 23, 2004

The Veeco Instruments Inc. First Amended and Restated Employee Stock Purchase Plan, as amended (the "Plan"), is hereby amended as follows:

1. Section 3.04 of the Plan is amended to read, in its entirety, as follows:

**3.04 Effective Date and Term of Plan**

No Offerings shall be made under the Plan after December 31, 2009.

2. Paragraphs (a) of Section 5.03 of the Plan is amended to read, in its entirety, as follows:

(a) A Participant may elect to reduce his or her level of payroll deductions during an Offering period by providing notice in such form and manner as prescribed by the Administrator no later than 30 days prior to the end of such Offering Period. Subject to paragraph (c), a Participant may make only one such election during an Offering period.

3. Paragraphs (b) of Section 5.03 of the Plan is amended to read, in its entirety, as follows:

(b) A Participant may elect to discontinue his or her payroll deductions for an Offering Period by providing notice in such form and manner as prescribed by the Administrator no later than 30 days prior to the end of such Offering Period. A Participant who elects to discontinue payroll deductions for an Offering may not again resume payroll deductions for that Offering.

4. Section 6.01 of the Plan is amended to read, in its entirety, as follows:

**6.01 Offering Period**

Offerings to purchase Stock under the Plan will be made during such periods as the Board or the Committee shall determine prior to the commencement of such Offering Period, provided, however, that no Offering Period will be longer than one calendar year or extend beyond the date set forth in Section 3.04.

5. Section 6.02 of the Plan is amended to read, in its entirety, as follows:

**6.02 Purchase Price**

The purchase price of Stock for an Offering shall be determined by the Board or the Committee prior to the commencement of such Offering Period, provided, however, that the purchase price shall not be lower than the lesser of:

- (a) 85 percent (85%) of the Fair Market Value of the Stock on first business day of the Offering period; and
- (b) 85 percent (85%) of the Fair Market Value of the Stock on the last business day of the Offering period.

6. Paragraph (b) of Section 6.04 of the Plan is amended to read, in its entirety, as follows:

(b) The maximum number of shares of Stock that may be purchased during Offering Periods falling within the same calendar year will equal the lesser of the number of shares (i) allowed under Section 423( b)(8) of the Code, or (ii) determined by the Board or the Committee prior to the commencement of each such Offering Period.

7. Paragraph (a) of Section 7.01 of the Plan is amended to read, in its entirety, as follows:

(a) A Participant may withdraw from an Offering at any time prior to the date that is 30 days prior to the end of the respective Offering Period. The Participant's notice of withdrawal shall be made in the form and manner determined by the Administrator.

\* \* \* \* \*



This Amendment was approved by the Compensation Committee of Veeco's Board of Directors on December 23, 2004, and will be submitted for approval by stockholders at Veeco's 2005 Annual Meeting of Stockholders.



**Veeco Instruments Inc.**  
**Annual Report on Form 10-K for the Year Ended December 31, 2004**

**VEECO INSTRUMENTS INC.**  
**100 Sunnyside Boulevard, Suite B**  
**Woodbury, NY 11797**

July 7, 2004

John Bulman  
P.O. Box 494  
36 Casey Lane  
Mount Sinai, NY 11766

Dear John:

By letter dated April 1, 2003, I had previously informed you of certain enhanced severance benefits which Veeco was making available to you in recognition of the valuable contributions you have made to Veeco's success. In light of your continued efforts at Veeco, the salary continuation benefit referred to in the April 1, 2003 letter is hereby increased to 12 months. The terms and conditions for the payment of this benefit, as described in the April 1, 2003 letter, will continue to apply.

I appreciate the commitment you have made to Veeco and it is with that understanding that you have been selected to receive this severance benefit.

If you agree with the foregoing, please sign below to so indicate.

Sincerely,

ACCEPTED AND AGREED:

/s/ Edward H. Braun  
Edward H. Braun  
Chairman and Chief Executive Officer

/s/ John Bulman  
John Bulman

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**VEECO INSTRUMENTS INC.**  
**100 Sunnyside Boulevard, Suite B**  
**Woodbury, NY 11797**

April 1, 2003

John Bulman  
P O Box 494  
36 Casey Lane  
Mount Sinai, NY 11766

Dear John:

On behalf of Veeco, I am pleased to offer to you enhanced severance arrangements in recognition of the valuable contributions you have made to Veeco's success.

In the event you are terminated without "Cause" or you resign for "Good Reason" (each as defined below), the following would apply:

(a) Veeco will pay you at least 6 months severance in the form of a salary continuation benefit based on your annual base salary in effect immediately prior to such termination (but without regard to any salary reduction program then in place), less applicable deductions.



(b) Any options to purchase shares of Veeco common stock granted to you on or after the date hereof ("Options") which are held by you as of the date of such termination shall remain exercisable until the earlier of (x) 12 months following the date of such termination and (y) the expiration of the original term of such Options.

(c) In addition, if such termination or resignation occurs within 12 months following a "Change of Control" (as defined below), any Options which are held by you as of the date of such termination that were not vested as of such date shall become immediately and fully vested as of such date.

Receipt of the benefits described above is conditioned upon your execution (without revocation) of a general release of claims in a form satisfactory to Veeco, including non-competition and non-solicitation provisions for the duration of the period during which salary continuation benefits are payable as described above. Please see the attached page for certain additional provisions of this letter.

I appreciate the commitment you have made to Veeco and it is with that understanding that you have been selected as a key member of the Veeco team to receive these severance benefits.

If you agree with the foregoing, please sign below to so indicate.

Sincerely,

/s/ Edward H. Braun  
Edward H. Braun  
Chairman and Chief Executive Officer

ACCEPTED AND AGREED:

/s/ John Bulman  
John Bulman



Additional Provisions

Please note that this letter does not alter the “at-will” nature of your employment with Veeco. This means that your employment may be terminated by you or by Veeco at any time, with or without cause. As described above, however, you may be entitled to severance benefits depending upon the circumstances of the termination of employment.

As used above, the following definitions shall apply:

“Cause” shall mean (i) your willful and substantial misconduct, (ii) your repeated, after written notice, neglect of duties or failure to perform your assigned duties, (iii) your commission of any material fraudulent act with respect to Veeco or its business, or (iv) your conviction of (or plea of no contest to) a crime constituting a felony.

“Change of Control” shall mean: (a) any person or group of persons becomes the beneficial owner of securities representing 50 percent or more of Veeco’s outstanding voting securities, or (b) the approval by Veeco’s stockholders of one of the following:

(i) Any merger or statutory plan of exchange (“Merger”) in which Veeco would not be the surviving corporation or pursuant to which Veeco’s voting securities would be converted into cash, securities or other property, other than a Merger in which the holders of Veeco’s voting securities immediately prior to the Merger have the same proportionate ownership of voting securities of the surviving corporation after the Merger;

(ii) Any Merger in which the holders of outstanding voting securities of Veeco prior to such Merger will not, in the aggregate, own a majority of the outstanding voting securities of the combined entity after such Merger; or

(iii) Any sale or other transfer (in one transaction or a series of related transactions) of all or substantially all of the Veeco’s assets or the adoption of any plan or proposal for Veeco’s liquidation or dissolution.

“Good Reason” shall mean a reduction of your base salary, other than as part of a salary reduction program affecting management employees generally.



**Veeco Instruments Inc.**  
**Annual Report on Form 10-K for the Year Ended December 31, 2004**  
**Subsidiaries of the Registrant**

<u>Subsidiary</u>	<u>Jurisdiction of Organization</u>
<u>U.S. Subsidiaries</u>	
Veeco Compound Semiconductor Inc. (formerly Veeco St. Paul Inc.)	MN
Veeco Ion Beam Equipment Inc.	DE
Veeco Metrology, LLC	DE
Veeco Slider Process Equipment Inc. (formerly Veeco Aii Inc.)	CA
Veeco Tucson Inc.	AZ
<u>Foreign Subsidiaries</u>	
Nihon Veeco K.K.	Japan
Veeco Asia Pte. Ltd.	Singapore
Veeco Instruments GmbH	Germany
Veeco Instruments Limited	England
Veeco Instruments S.A.S.	France
Veeco Korea Inc.	Korea
Veeco Instruments (Shanghai) Co. Ltd.	China
Veeco Taiwan Inc.	Taiwan

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**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference of our reports dated March 15, 2005, with respect to the consolidated financial statements and schedule of Veeco Instruments Inc. and Subsidiaries, Veeco Instruments Inc. management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Veeco Instruments Inc. and Subsidiaries, included in this Annual Report (Form 10-K) for the year ended December 31, 2004 in the following:

- The Registration Statement (Form S-8 No. 33-87394) pertaining to the Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan and the Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors;
- the Registration Statement (Form S-8 No. 33-95422) pertaining to the Veeco Instruments Inc. Employee Stock Purchase Plan;
- the Registration Statement (Form S-8 No. 33-95424) pertaining to the Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-08981) pertaining to the Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan and the Amended and Restated Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors;
- the Registration Statement (Form S-8 No. 333-35009) pertaining to the Amended and Restated Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors;
- the Registration Statement (Form S-8 No. 333-79469) pertaining to the Veeco Instruments Inc. Amended and Restated 1992 Employees' Stock Option Plan and the Veeco Instruments Inc. 1994 Stock Option Plan for Outside Directors;
- the Registration Statement (Form S-8 No. 333-36348) pertaining to the CVC, Inc. 1999 Non-Employee Directors' Stock Option Plan, the CVC, Inc. Amended and Restated 1997 Stock Option Plan, the CVC Holdings, Inc. Stock Option Plan, the Non-Qualified Stock Option Agreements Dated as of March 31, 1999 Between Commonwealth Scientific Corporation, Inc. and Certain Employees and Directors, the Incentive Stock Option Agreements Between Commonwealth Scientific Corporation, Inc. and Certain Employees and the CVC Holdings, Inc. Stock Option Agreements Between CVC Holdings, Inc. and Certain Employees;
- the Registration Statement (Form S-8 No. 333-39156) pertaining to the Veeco Instruments Inc. 2000 Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-49476) pertaining to the Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees;
- the Registration Statement (Form S-8 No. 333-66574) pertaining to amendments to the Veeco Instruments Inc. 2000 Stock Option Plan and to the Veeco Instruments Inc. 2000 Stock Option Plan for Non-Officer Employees;
- the Registration Statement (Form S-8 No. 333-69554) pertaining to the Applied Epi, Inc. 1993 Stock Option Plan, the Applied Epi, Inc. 2000 Stock Option Plan and certain Non-Qualified Restricted Stock Option Agreements between Applied Epi and Certain Employees and Former Employees of Applied Epi;

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- the Registration Statement (Form S-8 No. 333-88946) pertaining to the offer and sale of 2,200,000 shares of common stock under the 2000 Stock Option Plan;
  - and the Registration Statement (Form S-3 No. 333-84252) pertaining to the Veeco Instruments Inc. 4-1/8% Convertible Subordinated Notes Due 2008, the common stock issuable upon conversion of the notes and certain additional shares of common stock.

/s/ Ernst & Young LLP

New York, New York  
March 15, 2005

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**CERTIFICATION PURSUANT TO  
RULE 13a—14(a) or RULE 15d—14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Edward H. Braun, Chairman and Chief Executive Officer of Veeco Instruments Inc. (the "Company"), certify that: I have reviewed this annual report on Form 10-K for the year ended December 31, 2004 (the "Report") of the Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.  
/s/ EDWARD H. BRAUN

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Edward H. Braun  
Chairman and Chief Executive Officer  
Veeco Instruments Inc.  
March 15, 2005

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QuickLinks

[Exhibit 31.1](#)



**CERTIFICATION PURSUANT TO  
RULE 13a—14(a) or RULE 15d—14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, John F. Rein, Jr., Executive Vice President, Chief Financial Officer and Secretary of Veeco Instruments Inc. (the "Company"), certify that: I have reviewed this annual report on Form 10-K for the year ended December 31, 2004 (the "Report") of the Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.  
/s/ JOHN F. REIN, JR.

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John F. Rein, Jr.  
Executive Vice President,  
Chief Financial Officer and Secretary  
Veeco Instruments Inc.  
March 15, 2005

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QuickLinks

[Exhibit 31.2](#)



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Veeco Instruments Inc. (the "Company") on Form 10-K for the year ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Edward H. Braun, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:*(I)*  
The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2)

The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ EDWARD H. BRAUN

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Edward H. Braun  
Chairman and Chief Executive Officer  
Veeco Instruments Inc.  
March 15, 2005

A signed original of this written statement required by Section 906 has been provided to Veeco Instruments Inc. and will be retained by Veeco Instruments Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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QuickLinks

[Exhibit 32.1](#)



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Veeco Instruments Inc. (the "Company") on Form 10-K for the year ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John F. Rein, Jr., Executive Vice President and Chief Financial Officer and Secretary of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:*(1)*  
The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

*(2)*

The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOHN F. REIN, JR.

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John F. Rein, Jr.  
Executive Vice President,  
Chief Financial Officer and Secretary  
Veeco Instruments Inc.  
March 15, 2005

A signed original of this written statement required by Section 906 has been provided to Veeco Instruments Inc. and will be retained by Veeco Instruments Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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QuickLinks

[Exhibit 32.2](#)